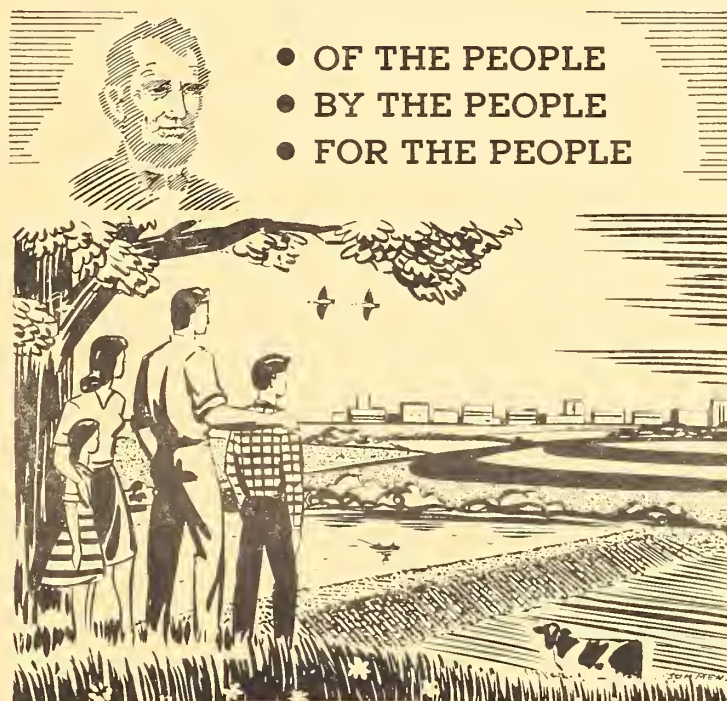


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STUDY of the RESOURCES of CENTRAL ILLINOIS LAND OF LINCOLN



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- BY THE PEOPLE
- FOR THE PEOPLE

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1972

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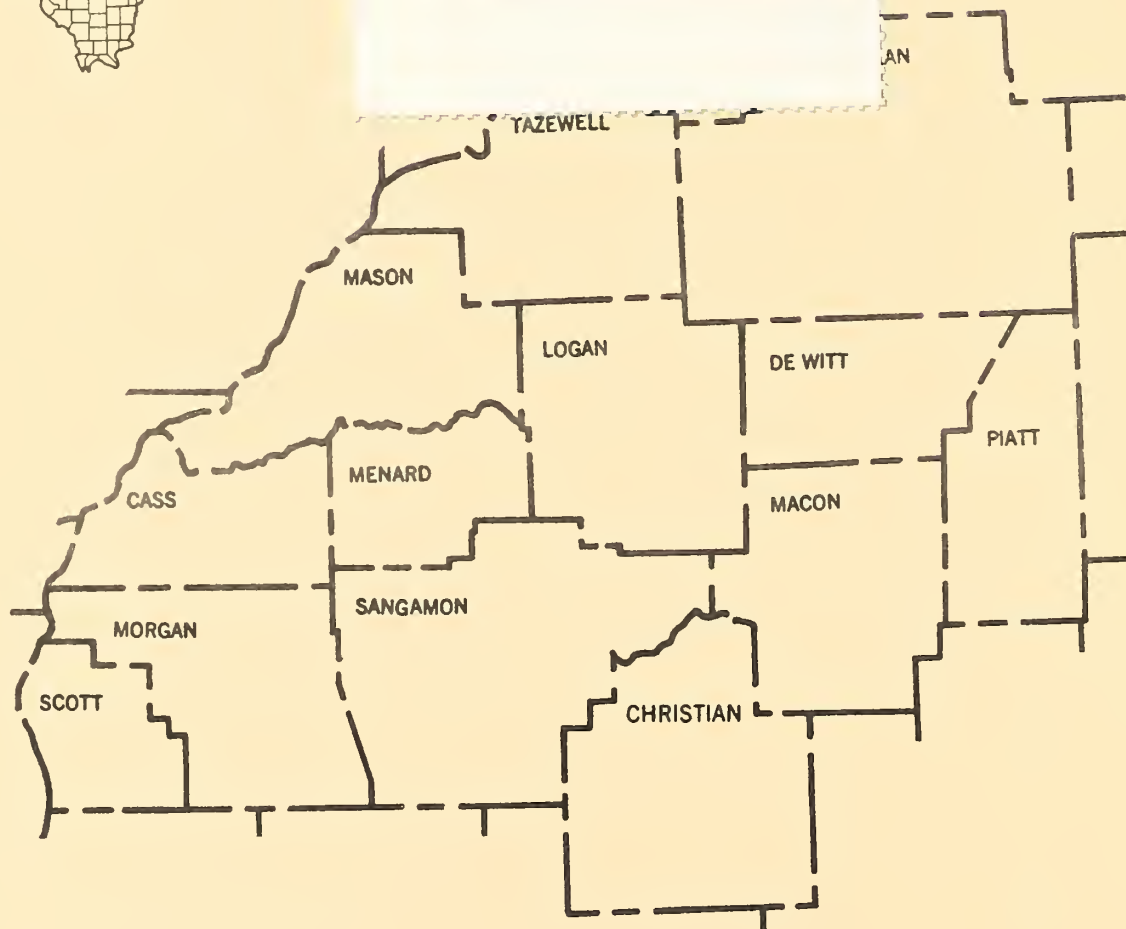
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STUDY OF THE RESOURCES OF

AUG 13 1973

CENTRAL ILLINOIS

CATALOGING - PREP.

The material in this study is a summary of information gathered during a fact finding study of the general characteristics and uses being made of the resources in Central Illinois.

The objective of this study is to examine the resources in light of the changing need for products from the land and other social and economic conditions and needs of the area, and to examine our present program in light of this information and to take a look at the direction or guidance we can obtain from the use of this data.

This report is not to be taken as a complete analysis for all items covered, but generally reflects the availability, trends, and uses being made of the resources of the area. Constant changes are taking place which will necessitate frequent review of this material to keep it up to date.

Prepared by Soil Conservation Service Personnel:

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The Soil Conservation Service Personnel who prepared this study wishes to pay tribute to the late Clarence E. Mick who was a dedicated Conservationist. Mr. Mick provided technical guidance in the initial stages of gathering materials for this publication.

Acknowledgement is made to the following people and organizations who have contributed material and information:

Illinois State Geological Survey, Urbana, Illinois
Illinois Division of Highways, Springfield, Illinois
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Division of Fisheries, Division of Forestry, Springfield, Illinois
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Cooperative Extension Service, Urbana, Illinois
Illinois State Water Survey, Urbana, Illinois
Illinois Cooperative Crop Reporting Service, Springfield, Illinois
University of Illinois Agricultural Experiment Station, Urbana, Ill.
Illinois Technical Advisory Committee on Water Resources
Illinois Commerce Commission
U. S. Army Corps of Engineers

STUDY OF THE RESOURCES OF
CENTRAL ILLINOIS

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SECTION I

SOILS

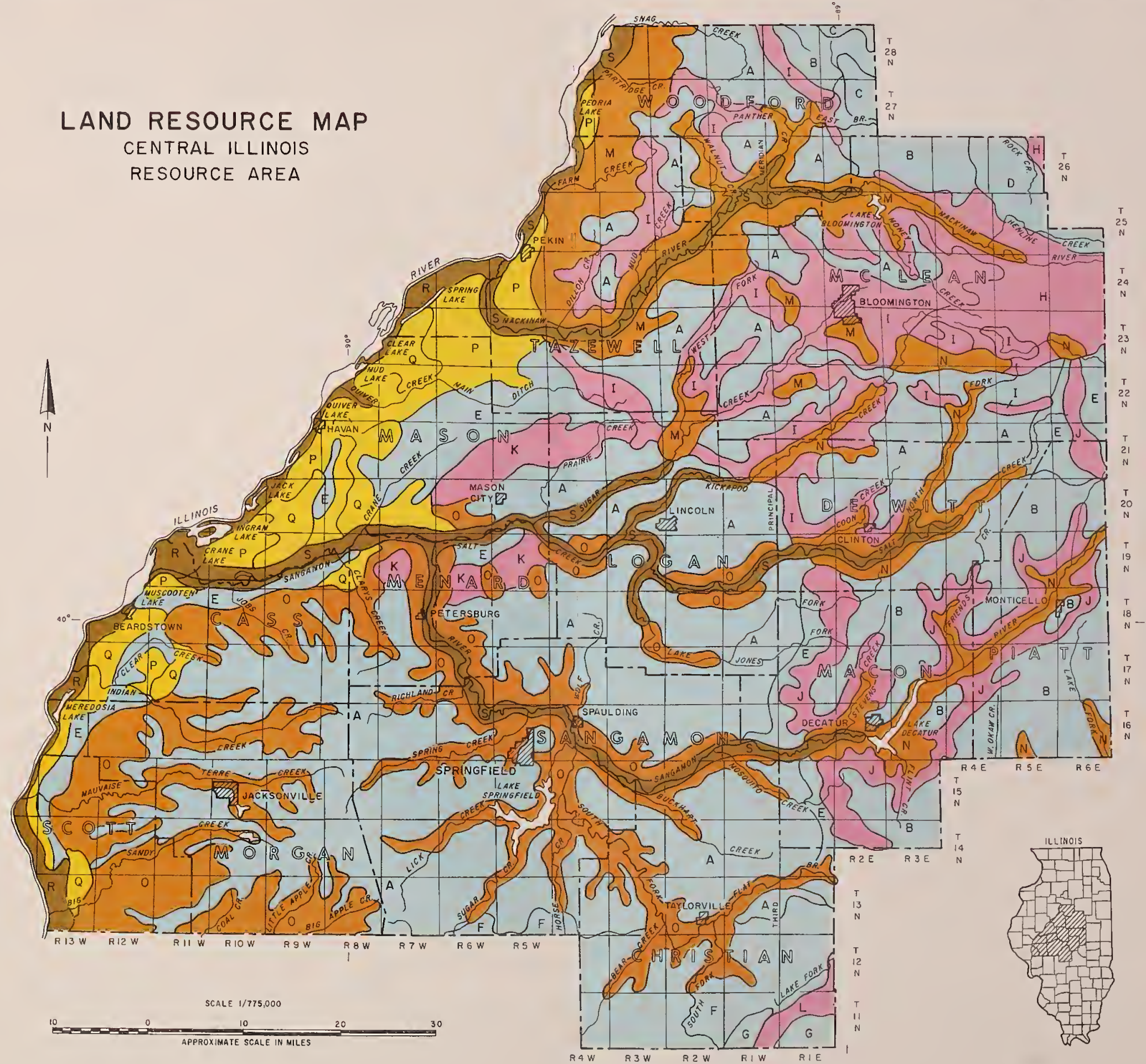
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 - 3. Thickness of Surficial Deposits Map

LAND RESOURCE MAP CENTRAL ILLINOIS RESOURCE AREA

LEGEND

- NEARLY LEVEL OARK-COLOREO SOILS
- A. IPAUA-MUSCATINE-SABLE-TAMA ASSOCIATION
 - B. ORUMMER-FLANAGAN ASSOCIATION
 - C. RUTLAND-STREATOR ASSOCIATION
 - D. ELLIOTT-ASHKUM ASSOCIATION
 - E. ORUMMER-ELBURN-LITTLETON-WORTHEN ASSOCIATION
 - F. HERRICK-VIRIDEN ASSOCIATION
 - G. COWOEN-OCONEE ASSOCIATION
- ROLLING TO NEARLY LEVEL OARK-COLOREO SOILS
- H. SAYBROOK-LAROSE-LISBON-ORUMMER ASSOCIATION
 - I. TAMA-CATLIN-SAYBROOK-SABLE ASSOCIATION
 - J. CATLIN-SIOELL-FLANAGAN-ORUMMER ASSOCIATION
 - K. BROAOWELL-LAWNOALE-OICKINSON-SABLE ASSOCIATION
 - L. DOUGLAS-PANA-VIROEN-COWOEN ASSOCIATION
- LIGHT-COLORED STEEP TO NEARLY LEVEL UPLAND SOILS
- M. FAYETTE-BIRKBECK-STRAWN-STRONGHURST ASSOCIATION
 - N. BIRKBECK-RUSSELL-MAAMI-LAWSON ASSOCIATION
 - O. CLINTON-HICKORY-SYLVAN-KEOMAH ASSOCIATION
- LIGHT AND OARK-COLOREO SANDY SOILS
- P. ONARGA-OICKINSON-AOE ASSOCIATION
 - Q. BLOOMFIELD-PLAINFIELD ASSOCIATION
- BOTTOM LAND SOILS
- R. OARWIN-BEAUCOUP ASSOCIATION
 - S. LAWSON-SAWMILL ASSOCIATION



CENTRAL ILLINOIS LAND RESOURCE MAP LEGEND

- I. AREAS DOMINATED BY NEARLY LEVEL TO UNDULATING HIGHLY PRODUCTIVE SOILS SUBJECT TO WETNESS WITH OCCASIONAL SLOPING AREAS SUBJECT TO EROSION. THESE SOILS ARE WELL SUITED TO INTENSIVE ROW CROPPING. MOST AREAS HAVE AGRICULTURAL DRAINAGE SYSTEMS INSTALLED. WETNESS AND SUSCEPTIBILITY TO FROST HEAVE ARE THE MAIN FEATURES AFFECTING URBAN, RECREATIONAL AND OTHER NON-FARM USES.
- A. Sable-Ipava-Muscatine-Tama Association: Deep, dark-colored, moderately to moderately slowly permeable, predominantly poorly and somewhat poorly drained with some well drained upland soils formed in deep silty material (loess). A few areas near streams are underlain by sand.
 - B. Drummer-Flanagan Association: Deep, dark-colored, moderately permeable, poorly and somewhat poorly drained upland soils formed from 3 to 5 feet of silty material (loess) over calcareous loamy glacial drift.
 - C. Rutland-Streator Association: Deep, dark-colored, moderately slowly permeable, somewhat poorly to poorly drained upland soils formed in 3 to 5 feet of silty material (loess) over calcareous silty clay glacial till.
 - D. Elliott-Ashkum Association: Deep, dark-colored, moderately slowly permeable, somewhat poorly drained and poorly drained soils formed in silty material (loess) 1½ feet thick over calcareous silty clay loam glacial till.
 - E. Drummer-Elburn-Littleton-Worthen Association: Deep, dark-colored, moderately permeable poorly to somewhat poorly drained upland soils formed in 3 to 5 feet of silty material (loess) over layers of loamy and sandy glacial outwash; and poorly to well drained terrace soils formed in silty material, bluff wash and loamy and sandy glacial outwash.
 - F. Herrick-Virden Association: Deep, dark-colored, moderately slowly permeable, somewhat poorly and poorly drained upland soils formed in deep silty material (loess). A few highly alkaline areas and local areas too impermeable for adequate drainage with tile systems occur in this area.
 - G. Cowden-Ocone Association: Deep, moderately dark-colored, slowly permeable, poorly and somewhat poorly drained upland soils formed in deep loess. These "claypan" soils are generally too impermeable for adequate drainage with tile systems. Shallow surface ditches are used in many places to remove excess water.

II. AREAS OF ROLLING SOILS SUBJECT TO EROSION AND NEARLY LEVEL, HIGHLY PRODUCTIVE SOILS SUBJECT TO WETNESS. NEARLY LEVEL AREAS ARE WELL SUITED TO INTENSIVE CROPPING. LOW LYING WET AREAS AND STEEPLY SLOPING AREAS HAVE SEVERE LIMITATIONS FOR MOST NON-FARM USES. GENTLY SLOPING AREAS ARE SUITED FOR MOST FARM AND NON-FARM USES.

- H. Saybrook-LaRose-Lisbon-Drummer Association: Deep, dark-colored, moderately permeable, well to poorly drained upland soils formed primarily in $1\frac{1}{2}$ to 3 feet of silty material (loess) over calcareous, loamy glacial till. Till is exposed on some slopes.
- I. Tama-Catlin-Saybrook-Sable Association: Deep, dark-colored, primarily moderately permeable, well to poorly drained upland soils formed in $1\frac{1}{2}$ to 5 feet or more of loess over loamy glacial till. Moderately slowly permeable Varna soils occur in eastern Woodford County.
- J. Catlin-Sidell-Flanagan-Drummer Association: Deep, dark-colored moderately permeable, well to poorly drained upland soils formed in $1\frac{1}{2}$ to 5 feet of silty material (loess) over loam glacial till. A few areas of Varna soils in southeastern McLean and northern Piatt counties are moderately slowly permeable soils formed in silty clay loam glacial till.
- K. Broadwell-Lawndale-Dickinson-Sable Association: Deep, dark-colored, moderately permeable, well to poorly drained upland soils formed primarily in silty material (loess) more than $3\frac{1}{2}$ feet thick over sand and moderately rapidly permeable soils formed in sand.
- L. Douglas-Pana-Virden-Cowden Association: Pana and Douglas soils are deep, moderately dark-colored, moderately permeable, well drained rolling upland soils. They formed in thin to thick silty material (loess) over gravelly and loamy glacial drift; Virden and Cowden are deep, dark and moderately dark colored, moderately slowly to slowly permeable, poorly to somewhat poorly drained, nearly level soils formed in silty material (loess).

III. AREAS OF PREDOMINANTLY HILLY TO UNDULATING LIGHT-COLORED UPLAND SOILS SUBJECT TO EROSION WITH SOME NEARLY LEVEL AREAS SUBJECT TO WETNESS. HILLY AREAS ARE SUITED TO WOODLAND AND PASTURE WITH SOME LESS SLOPING AREAS SUITED TO MODERATE CROPPING. NEARLY LEVEL AREAS ARE SUITED TO INTENSIVE CULTIVATION. STEEP SLOPES AND SOME WET AREAS HAVE SEVERE LIMITATIONS FOR NON-FARM USES. WELL DRAINED, NEARLY LEVEL TO GENTLY SLOPING AREAS HAVE SLIGHT TO MODERATE LIMITATIONS FOR SUCH USES.

- M. Fayette-Strawn-Stronghurst Association: Deep, light-colored, moderately permeable, well drained upland soils formed in deep loess over loamy glacial till which is exposed on steep slopes; and occasional nearly level, moderately slowly permeable, somewhat poorly to poorly drained soils formed in deep loess.

- N. Birkbeck-Russell-Miami-Lawson Association: Deep, light-colored, moderately permeable, well drained with occasional poorly and somewhat poorly drained upland soils formed in $1\frac{1}{2}$ to 5 feet of loess over loamy glacial till which is exposed on slopes; and narrow areas of dark colored, nearly level, bottomland areas developed from alluvium which are subject to flooding.
 - O. Clinton-Hickory-Sylvan-Keoman Association: Deep, light-colored, moderate to moderately slowly permeable, well to somewhat poorly drained upland soils formed in deep loess with loamy glacial till exposed on some steep slopes. Some areas near streams are underlain by sand.
- IV. AREAS OF ROLLING TO UNDULATING SANDY SOILS SUBJECT TO EROSION AND DROUTHINESS WITH SOME NEARLY LEVEL AREAS SUBJECT TO WETNESS. SOME AREAS ARE TOO DROUTHY FOR ROW CROP PRODUCTION. NEARLY LEVEL AREAS ARE SUITED TO INTENSIVE CULTIVATION. GROWING OF SPECIALTY CROPS WITH IRRIGATION IS BECOMING COMMON. LOOSE, PORUS, UNSTABLE SAND AND A POSSIBILITY OF GROUND WATER CONTAMINATION PRESENTS HAZARDS FOR URBAN, RECREATIONAL AND OTHER NON-FARM USES.
- P. Onarga-Dickinson-Ade Association: Deep, dark-colored, moderate to rapidly permeable, well drained terrace soils formed in sand with occasional areas of wetness.
 - Q. Bloomfield-Plainfield Association: Light-colored, rapidly permeable, well to excessively drained soils formed in deep loose sands that have low available moisture capacity.
- V. AREAS OF DARK COLORED BOTTOMLAND SOILS SUBJECT TO FLOODING. THESE SOILS ARE PRODUCTIVE AND ARE SUITED TO INTENSIVE CULTIVATION OF ROW CROPS. THE OVERFLOW HAZARD AND WETNESS SEVERELY LIMITS THESE SOILS FOR URBAN, RECREATIONAL AND OTHER NON-FARM USES. SOME AREAS ARE PROTECTED BY LEVEES.
- R. Darwin-Beaucoup Association: Deep, dark-colored, slowly to moderately permeable, poorly drained soils formed in clayey alluvial sediments on floodplains.
 - S. Sawmill-Lawson Association: Deep, dark-colored, moderately permeable, poorly to somewhat poorly drained soils formed in silty and clayey alluvial sediments on floodplains. This association includes some soils on benches adjacent to the uplands.

TABLE OF SOIL ASSOCIATION ACRES BY COUNTIES IN CONJUNCTION WITH THE LAND RESOURCE MAP AND LEGEND

	A	B	C	D	E	F	G	H	I	J
Cass	70,795				37,290					
Christian	177,555				5,490	147,030	19,745			
DeWitt	78,755	47,520			500				53,460	
Logan	272,200				4,065				20,790	
McLean	136,175	51,000		50,480	29,700			132,165	212,355	19,305
Macon	44,550	98,175			38,610					99,830
Mason	22,275				75,280					
Menard	70,150				10,595					
Morgan	160,020				8,910					
Piatt		182,000			8,275	14,000				65,900
Sangamon	331,930									
Scott	17,820				12,625					
Tazewell	88,645				31,185				80,100	
Woodford	127,970	44,550	19,300						46,000	
Total Acres	1,598,840	423,245	19,300	50,840	262,525	161,030	19,745	132,165	412,705	185,035
	K	L	M	N	O	P	Q	R	S	
Cass					70,165	6,800	34,645		7,605	
Christian		16,590			81,120				8,300	
DeWitt				66,825					14,815	
Logan	17,820		13,365	4,455	50,490				2,225	
McLean			74,250	43,065					7,425	
Macon				80,190					14,850	
Mason	34,155				8,910	95,040	80,190	23,760	11,880	
Menard	27,510				75,090		4,455			
Morgan					182,150		7,425	6,685		
Piatt				23,500						
Sangamon					182,270				35,100	
Scott					103,195		13,950			
Tazewell			108,660			62,370	4,450	22,275	20,235	
Woodford			77,330			6,190			22,340	
Total Acres	79,485	16,590	273,605	218,035	753,390	170,400	145,115	52,720	144,775	

GEOLOGY

SURFACE DEPOSITS CENTRAL ILLINOIS RESOURCE AREA

Two major continental glaciations during the "ice age" are largely responsible for the surficial deposits in the Central Illinois Resource Area. These surficial deposits have greatly affected the development of the rich agricultural soils and surface mineral deposits of the area. See the map illustrating the thickness of surficial deposits over bedrock.

Materials from the Illinoian and the Wisconsinan glaciers, the last two of four major glaciations, are present in the area.

Glacial deposits include till and outwash. Till is material carried by and deposited from the glacier. Stratified outwash materials occur in front of the melting glaciers or as "valley trains" along streams. Outwash is materials carried by glacial melt waters and sorted and deposited in quieter waters. During dry periods wind blew across the valleys and outwash plains and covered the uplands with thick deposits of silty material known as loess. Most of the area, except the eroded hillsides, flood plains and sandy outwash areas, have a thick mantle of loess. Loess is the parent material of some of our most productive soils. Areas with more clay in the subsoils are in southern Sangamon and Christian counties where loess deposits are thinner.

The Illinoian ice sheet (or glacier if you prefer) covered most of the state of Illinois. The resulting glaciated topography is distinguished by its flatness and shallow entrenchment of drainage. Materials from the Illinoian glaciation, primarily till, underlie the loess in slightly more than one-half of the western portion of the resource area. During the interval between the Illinoian and Wisconsinan glaciers, soils were formed in the till, but later were covered by loess from the Wisconsinan glaciation. In some places, these buried soils (paleosols) are exposed on slopes. They are much older than soils formed in loess or Wisconsinan drift. Erosion was active during interglacial times. Many of these old soils had lost their surface layer and upper subsoil before being covered by loess.

Wisconsinan till covers the remaining part of the resource area. This includes all of Woodford, McLean, and Piatt counties; and most of Tazewell, DeWitt, and Macon counties; and the northeast corner of Logan County. It is the least weathered glacial till because it is youngest in age. Drainage patterns are irregular and the

topography consists of broad undulating morainic ridges and with intervening wide stretches of relatively flat or gently rolling till plains. Morainic ridges are numerous. They are elongated ridges of till deposits that mark the farthest advance of the pulsating glacier. In places where the glacier retreated with some uniformity, it left nearly level till plains.

Immense floods, produced by melting of the Wisconsin glaciers deposited large amounts of sand and gravel as outwash plains and valley trains along streams. A large area of sandy and loamy outwash occupies most of the western part of Mason County; the southwestern part of Tazewell County; and the extreme western parts of Cass, Morgan, and Scott counties. High winds reworked much of the sandy outwash shaping it into dunes. Some wind-deposited sand is in the uplands adjacent to the outwash areas.

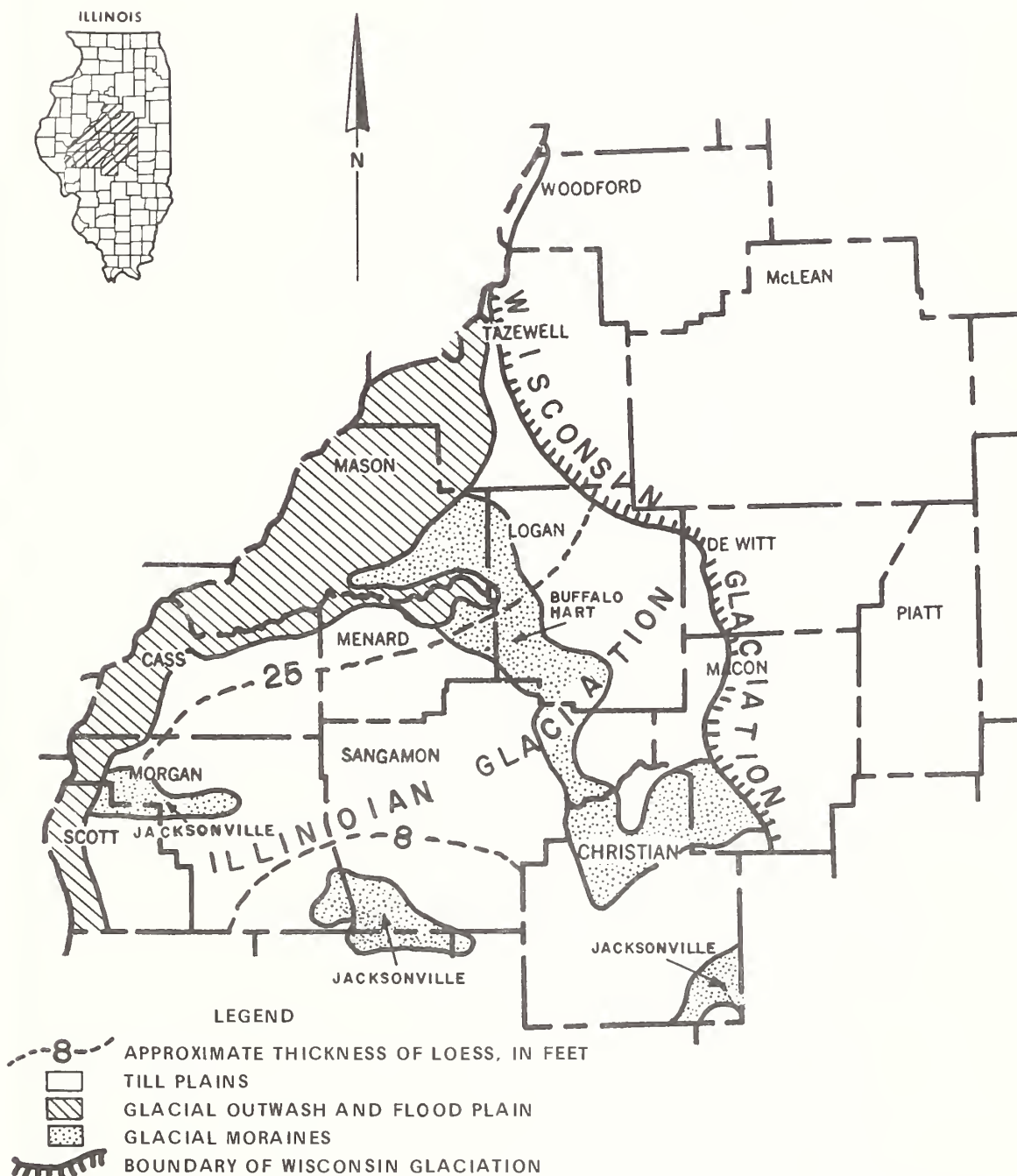
Most of the sand and gravel deposits in the area are outwash from glaciers. There are many gravel pits developed in these deposits. Most of the material is used for road gravel. The pits generally occur in areas of outwash along streams called "valley trains." These deposits occur as benches along tributaries such as Salt, Sugar and Kickapoo Creeks and the Mackinaw and Sangamon Rivers.

Reference to the "General Soils Map" and narrative will better explain kinds and composition of material that have been deposited in this resource area.

Refer to the map, "Thickness of Surficial Deposits" to determine depth to bedrock and thickness of the deposits above bedrock.

- References:
- (1) Surface Deposits of Illinois by Thomas H. Thornburn, Engineering Experiment Station
 - (2) Illinois State Geological Survey
 - (3) Resource Studies of Northeastern Illinois and of West Central Illinois

SURFACE GEOLOGY MAP CENTRAL ILLINOIS RESOURCE AREA



Source: 1. Glacial Map of Northeastern Illinois by George Ekblaw - Illinois State Geological Survey
 2. Map of Surface Deposits of Illinois by Thomas H. Thornburn, University of Illinois, Engineering Experiment Station

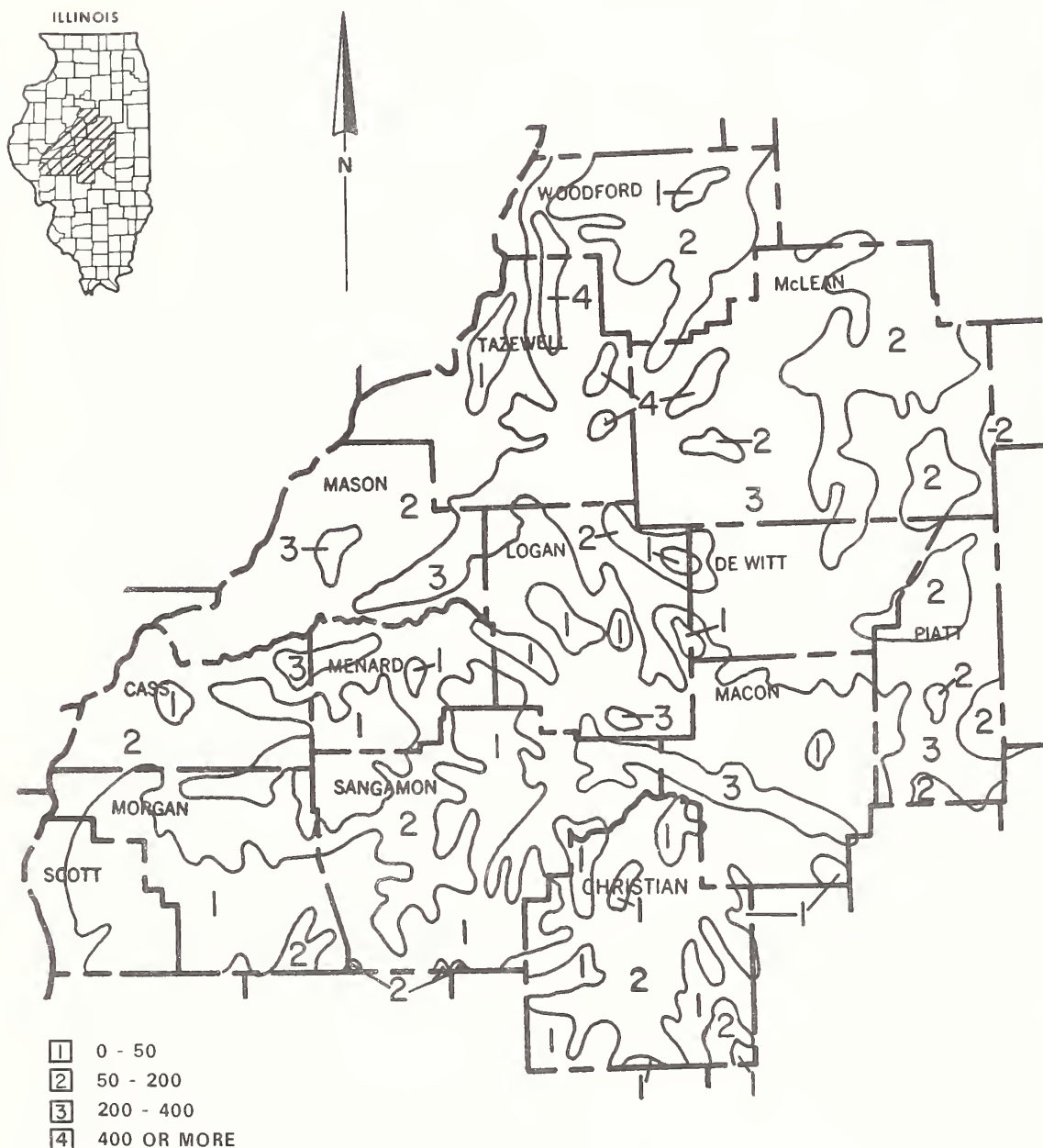
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THICKNESS OF SURFICIAL DEPOSITS-IN FEET

(Includes Glacial Drift, Loess, Alluvium)

CENTRAL ILLINOIS RESOURCE AREA



Source: Illinois State Geological Survey..

SCALE 10 0 10 20 30 40 MILES

SCALE 1/1,320,000

SECTION II

CLIMATE

CONTENTS

A. Climate Plate Number 1

Length of Growing Season

Mean Date of First Freeze in the Fall

Mean Date of Last Freeze in the Spring

Average Annual Precipitation

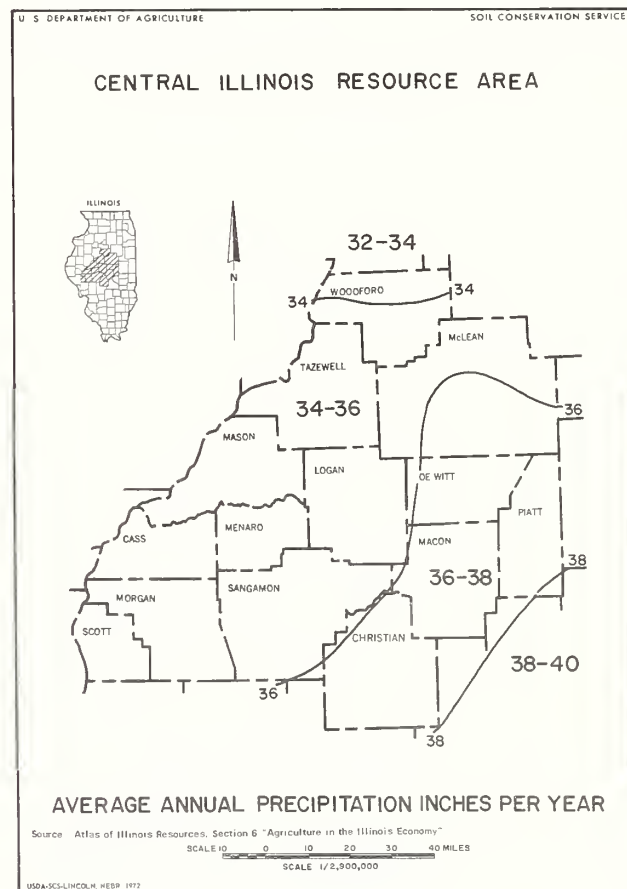
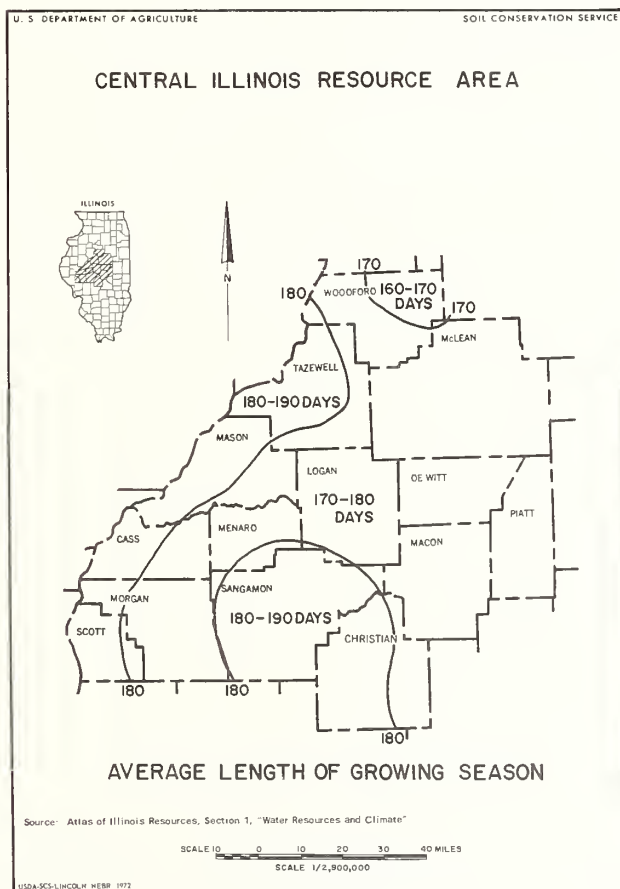
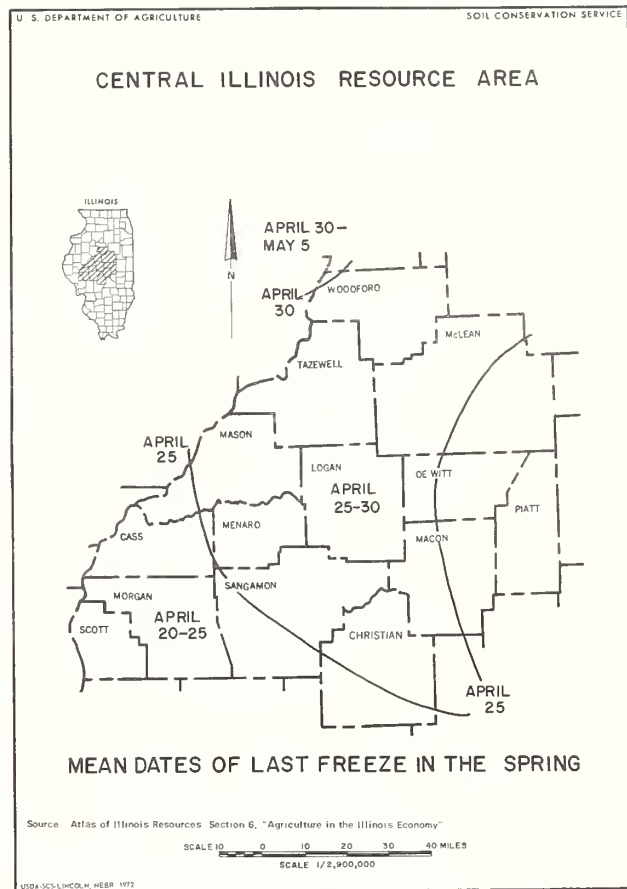
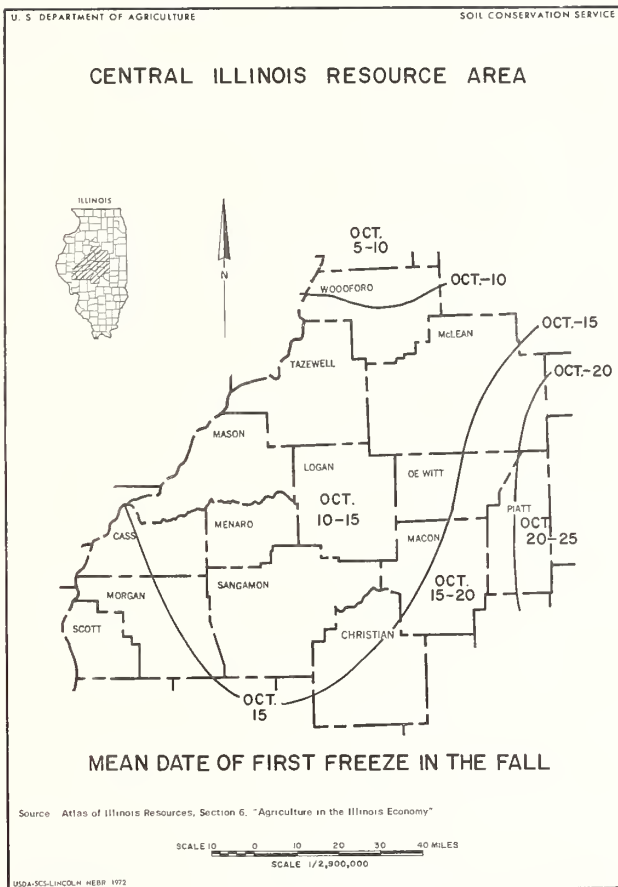
B. Climate Plate Number 2

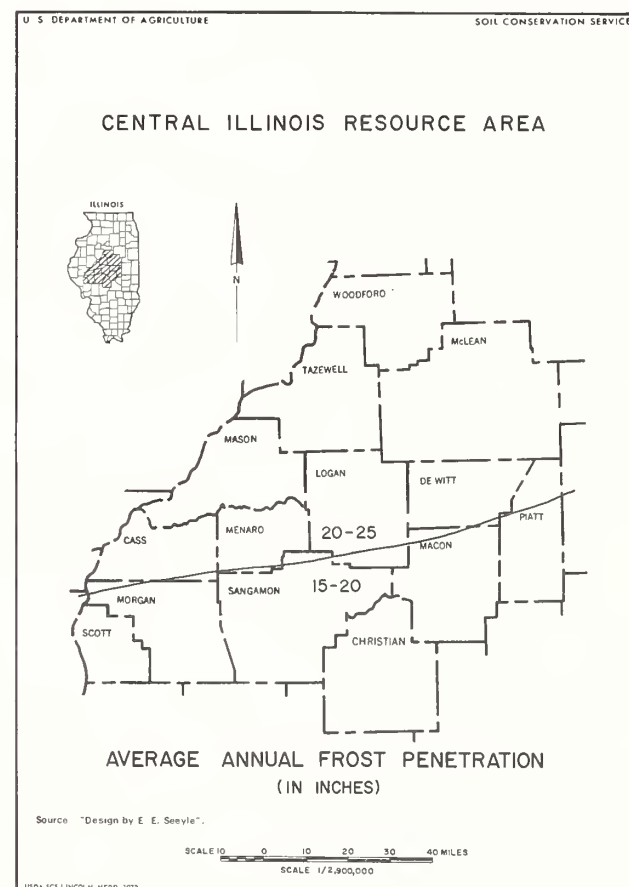
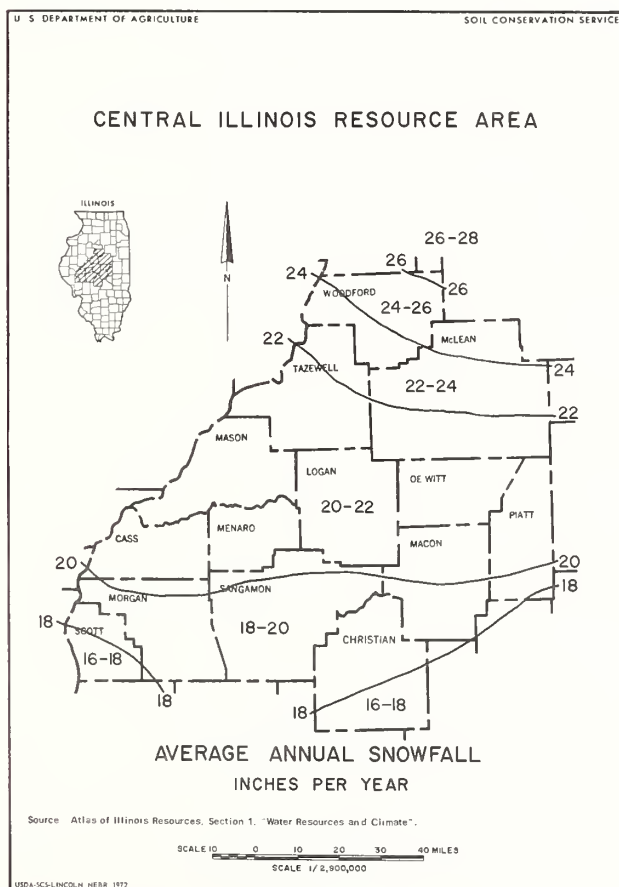
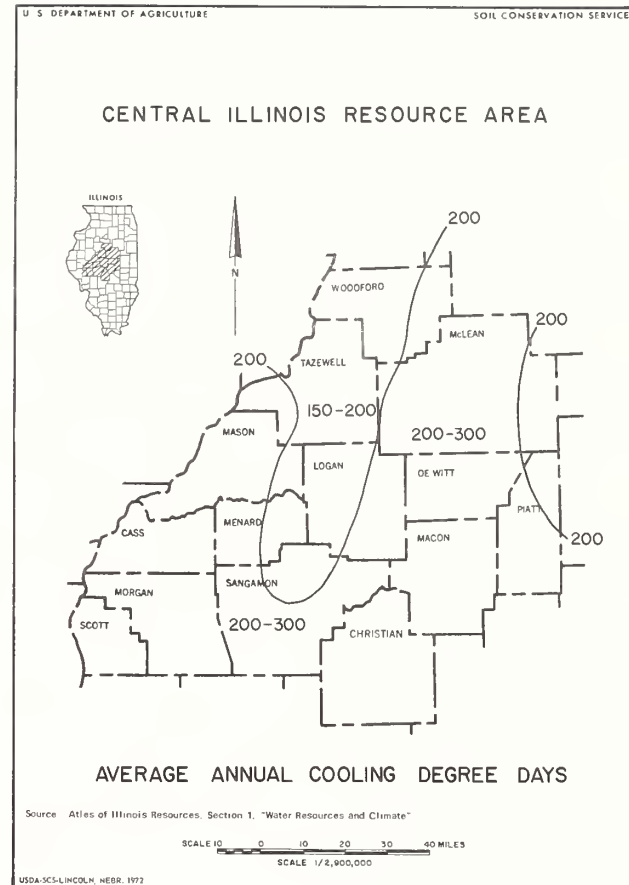
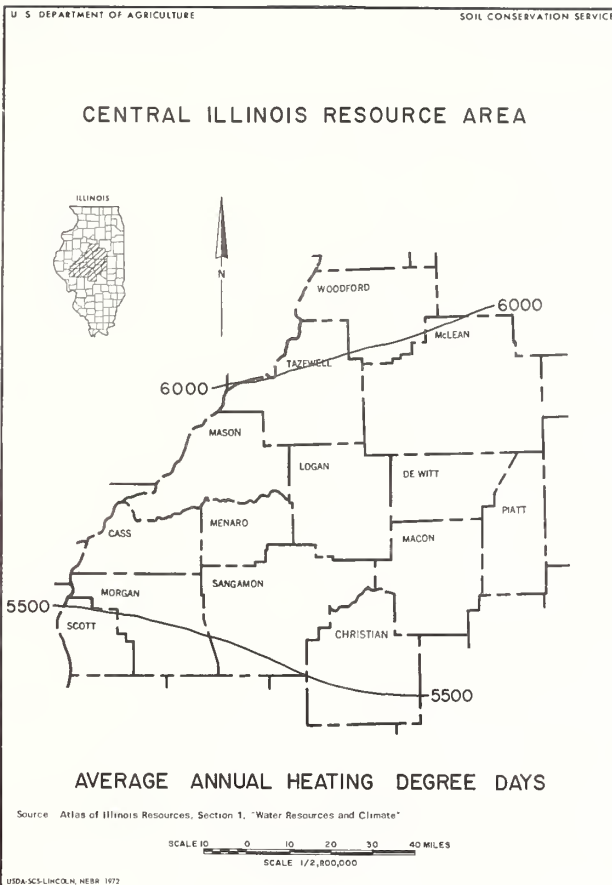
Average Annual Cooling Degree Days

Average Annual Heating Degree Days

Average Annual Frost Penetration - Inches

Average Annual Snow-fall - Inches





SECTION III

WATER

CONTENTS

- A. Underground Water
 - 1. Domestic, Industrial and Agricultural
 - 2. Underground Aquifers - Maps
- B. Surface Water
 - 1. Narrative
 - 2. Map of Surface Water Resources Showing Existing and Potential Reservoirs

UNDERGROUND WATER

For Domestic, Industrial and Agricultural Uses

Sand and gravel deposits are the most important aquifers along the courses of streams and in the fill of buried valleys in Central Illinois. They are also important sources of ground water in areas where the glacial drift is thick. The attached figure shows the probability of occurrence of sand and gravel aquifers. The areas shown as "good to excellent" are underlain by thick deposits of unconsolidated material containing sand and gravel aquifers. Groundwater for domestic and farm supplies may be obtained readily from this material with small diameter wells. The probabilities for construction of high-capacity wells for industries, municipalities and irrigation are good, although test drilling is necessary to locate suitable sand and gravel deposits.

The area shown as "fair to good" on the sand and gravel aquifer figure are underlain by moderate thicknesses of unconsolidated materials that fill shallow valleys or lie on the uplands bordering the main valleys. These materials contain thin and discontinuous deposits of sand and gravel. Ground water for domestic and farm supplies is obtained locally in this area from wells drilled in sand and gravel but in some places good water-yielding deposits are absent and water from the unconsolidated material is obtainable only with large-diameter dug wells. The probabilities of obtaining supplies of water for industrial and municipal purposes are poor to fair. The areas shown as "poor" are primarily bedrock upland. Glacial deposits, if present, are thin or are composed mainly of tight till. Sand or gravel deposits which might supply ground water are rare and most wells obtain water from the bedrock.

The Limestone and Sandstone Aquifers Map shows the distribution and water-yielding character of the bedrock formations that crop out at the surface or lie directly beneath the glacial and alluvial material. Pennsylvanian bedrock, encountered below the drift in most parts of the area, generally is not a reliable source of ground water. Locally, however, domestic and farm supplies are obtainable from creviced limestone, permeable sandstone or cracked shale and coal in the upper part of the Pennsylvania bedrock.

Mississippian age limestone in Mason, Cass, Scott and Morgan are water-yielding where creviced. But generally they are not utilized in this area because of excellent potential of shallow surface drifts.

Large ground water supplies, development of ground water supplies for municipal, industrial and irrigation purposes requires technical advice and careful planning based on all available geologic, geophysical, and hydrologic data.

For more detailed information on ground water principles, availability, and methods of developing ground water supplies in Central Illinois see the following references:

Cir. 232 Ground Water Geology in Western Illinois, South Part

Cir. 248 Ground Water Geology in East-Central Illinois

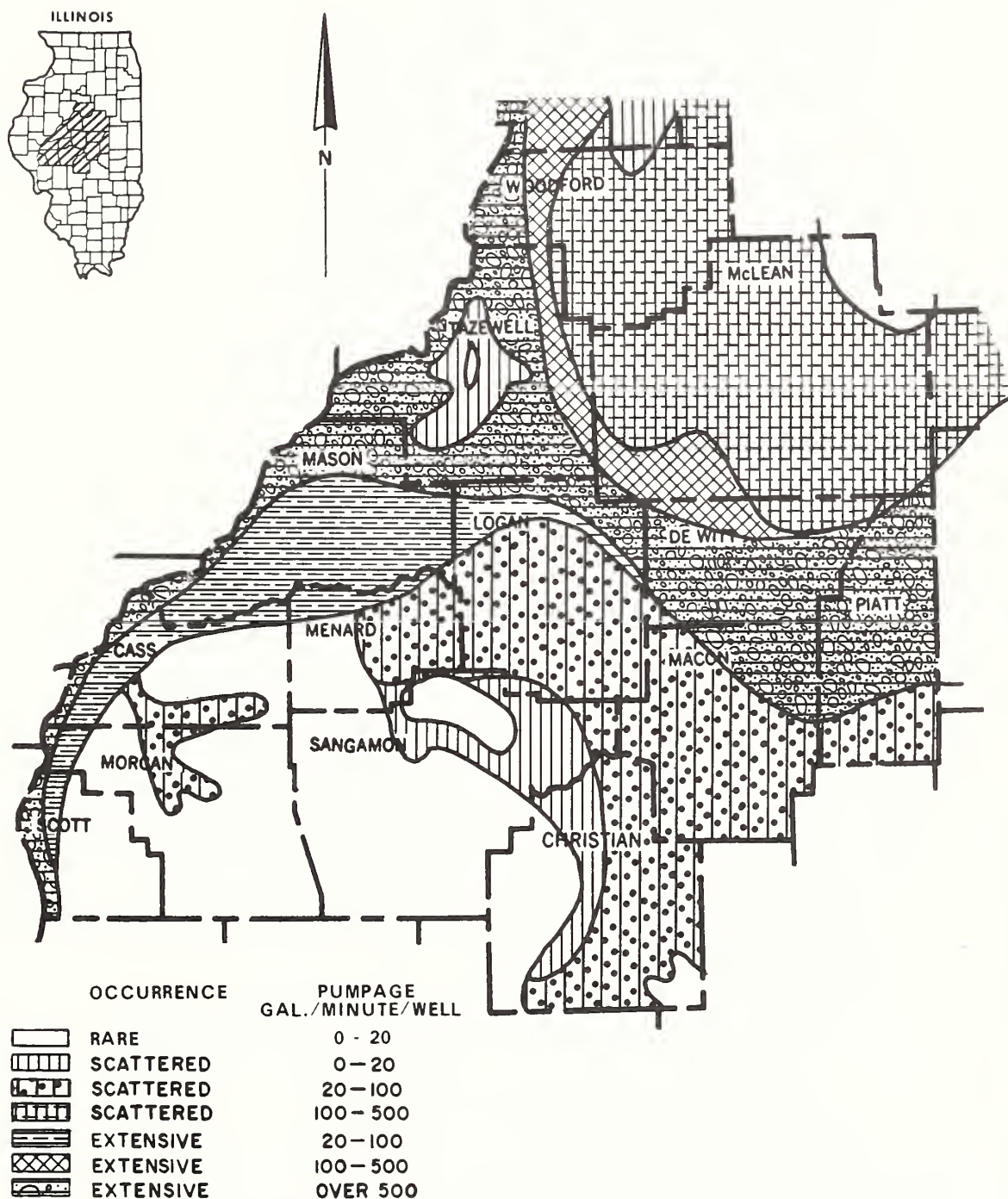
Cooperative Ground Water Report 3. Preliminary Report on Ground-water Resources of Havana Region in West Central Illinois

Water for Illinois, A Plan for Action, March 1967, prepared by Illinois Technical Advisory Committee on Water Resources.

For information on a particular ground water problem contact the:

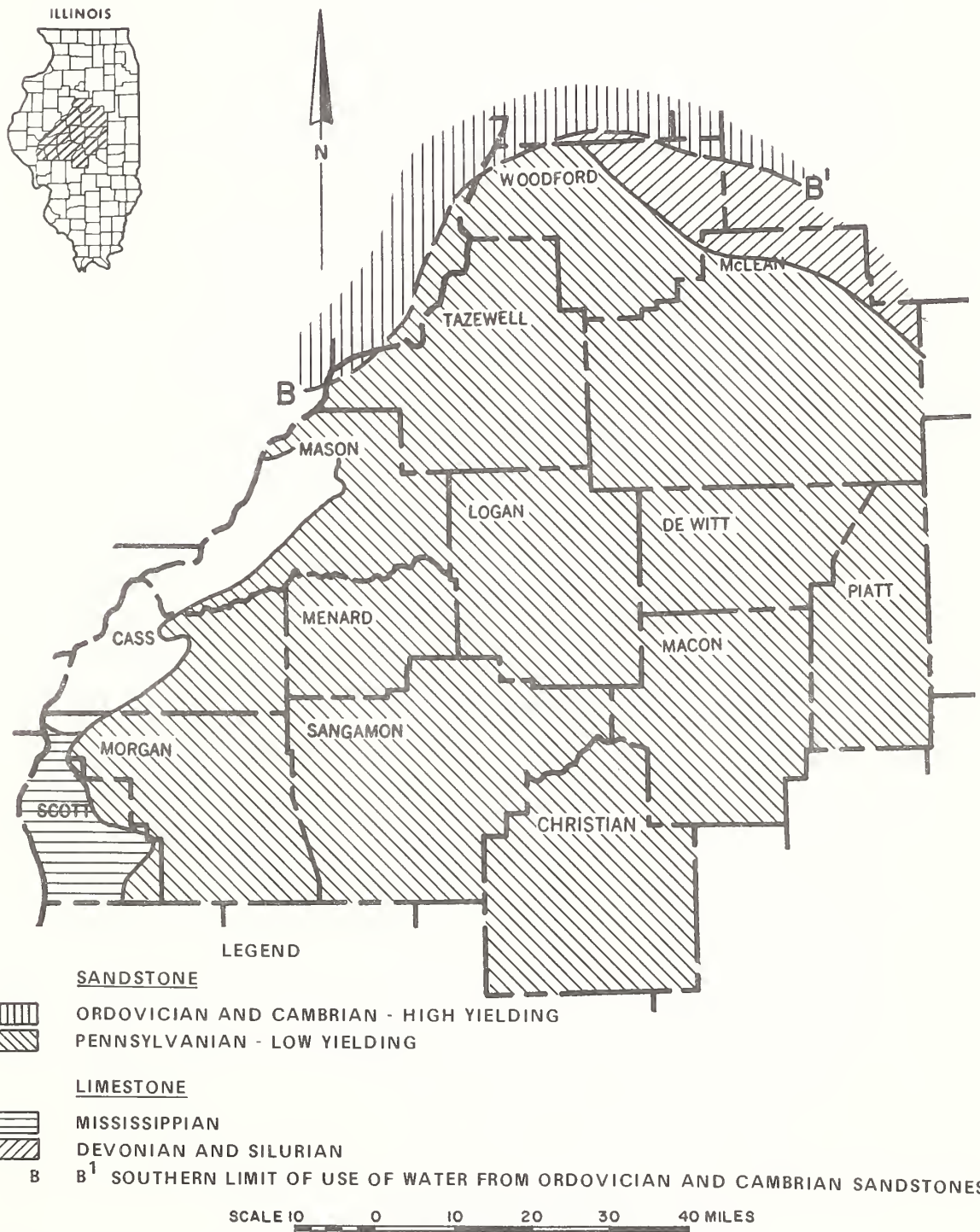
Illinois State Geological Survey and Illinois State Water Survey.

SAND AND GRAVEL AQUIFERS AND RECORDED PUMPAGE



Source: Atlas of Illinois Resource:
Sec. 1. Water Resources and Climate, page 15.

LIMESTONE AND SANDSTONE AQUIFERS



Source: Atlas of Illinois Resources; Sec. 1. SCALE 1/1,320,000
 Water Resources and Climate, pages 17 - 19.

SURFACE WATER

The Central Illinois resource area is bordered by the Illinois River on the west and is internally drained by principally the Mackinaw and Sangamon Rivers. Most of the area is well supplied with ground water, but it is becoming increasingly clear that we will need to conserve water in the future to meet the growing demands. One important means of conserving water is the impoundment of flood runoff in reservoirs, for use in period of drought and at other times. Central Illinois has 5 larger reservoirs and others are being planned or constructed. A large potential exists, as shown on the Surface Water Resource map, for development of reservoir sites. The potential reservoirs shown are only those given in Report of Investigation 56, Potential Surface Water Reservoirs of North-Central Illinois, Illinois State Water Survey.

The potential sites were located in a 1966 study by the State Water Survey with assistance from the State Geological Survey and Soil Conservation Service. The sites are potential insofar as they have: 1) the topographic characteristics necessary to impound water, 2) runoff from the watershed in sufficient quantities to provide storage for beneficial use, plus anticipated losses; and 3) relative freedom from man-made or natural obstructions.

The following criteria was used in determining availability of sites:

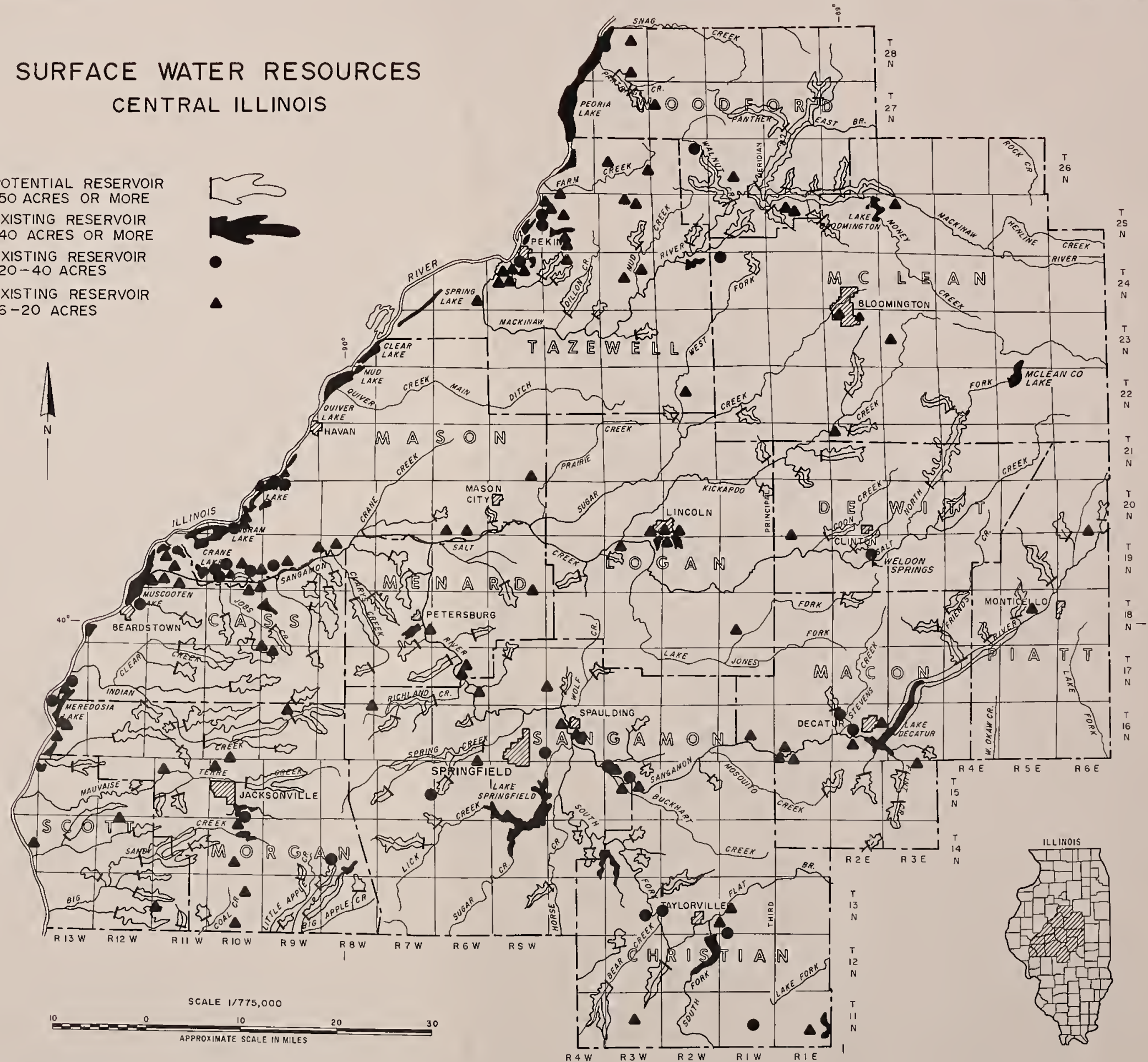
1. The surface area should be larger than 50 acres.
2. Maximum depth at dam not less than 20 feet.
3. Average mean depth not less than 7 feet.
4. Time required to fill the reservoir should be in accord with standards considering relationship of capacity to drainage area.
5. A maximum allowable storage loss of 2 percent per year by sedimentation.
6. Maximum dam length of 0.5 miles.
7. Maximum dam height of 90 feet.

Selected References:

1. Illinois Surface Water Inventory, Special Fisheries Report No. 1, February 1964, and Supplements, Illinois Department of Conservation, Division of Fisheries.

SURFACE WATER RESOURCES CENTRAL ILLINOIS

POTENTIAL RESERVOIR
50 ACRES OR MORE
EXISTING RESERVOIR
40 ACRES OR MORE
EXISTING RESERVOIR
20-40 ACRES
EXISTING RESERVOIR
6-20 ACRES



SOURCE
SCS DRAWING S.O.-26,831, ILLINOIS STATE
WATER SURVEY AND ILLINOIS DEPARTMENT
OF CONSERVATION

LAMBERT CONFORMAL CONIC PROJECTION

SECTION IV

MINERALS

CONTENTS

- A. Geology and Associated Minerals
- B. Bedrock Map
- C. Surface Acres Disturbed by Mining
- D. Coal Resources - Map
- E. Clay Resources and Operations - Map
- F. Sand and Gravel Resources and Operations - Map
- G. Limestone Resources and Operations - Map
- H. Oil and Gas Fields - Map

GEOLOGY AND ASSOCIATED MINERALS CENTRAL ILLINOIS RESOURCE AREA

The mineral resources within the area are many and varied. They result from a long sequence of events occurring in the geological history of the state.

Granite of the very remote past underlies most of the resource area; but it is hidden by hundreds of feet of younger sedimentary rocks. These younger rocks are a source of most of the area's coal, oil and limestone. The rocks were originally deposited as sand or clay or as the accumulation of the hard parts of organisms. They were laid down in ancient oceans which covered all of the resource area. These sedimentary rocks were then buried by deposits left by great glaciers during the "ice age."

The sediments deposited in ancient seas during the various geologic periods are today the limestones, sandstones and shales making up the bedrock. From the bedrock comes crushed stone, agricultural limestone, brick and tile making clays and other mineral products. These minerals are generally too deep to be mined economically as they are overlain by thick glacial deposits. See the map "Thickness of Surficial Deposits."

Bordering some of the ancient seas were enormous swamps containing luxuriant vegetation. This vegetation grew, died and accumulated--to be later compressed into extensive coal deposits. These coal deposits are contained in a large spoon shaped basin in Illinois, and are overlain by younger sedimentary rocks and glacial drift. Most of the coal in the area is also too deep to be mined economically. Though there are several shaft mines in the area, many of them are now inoperative.

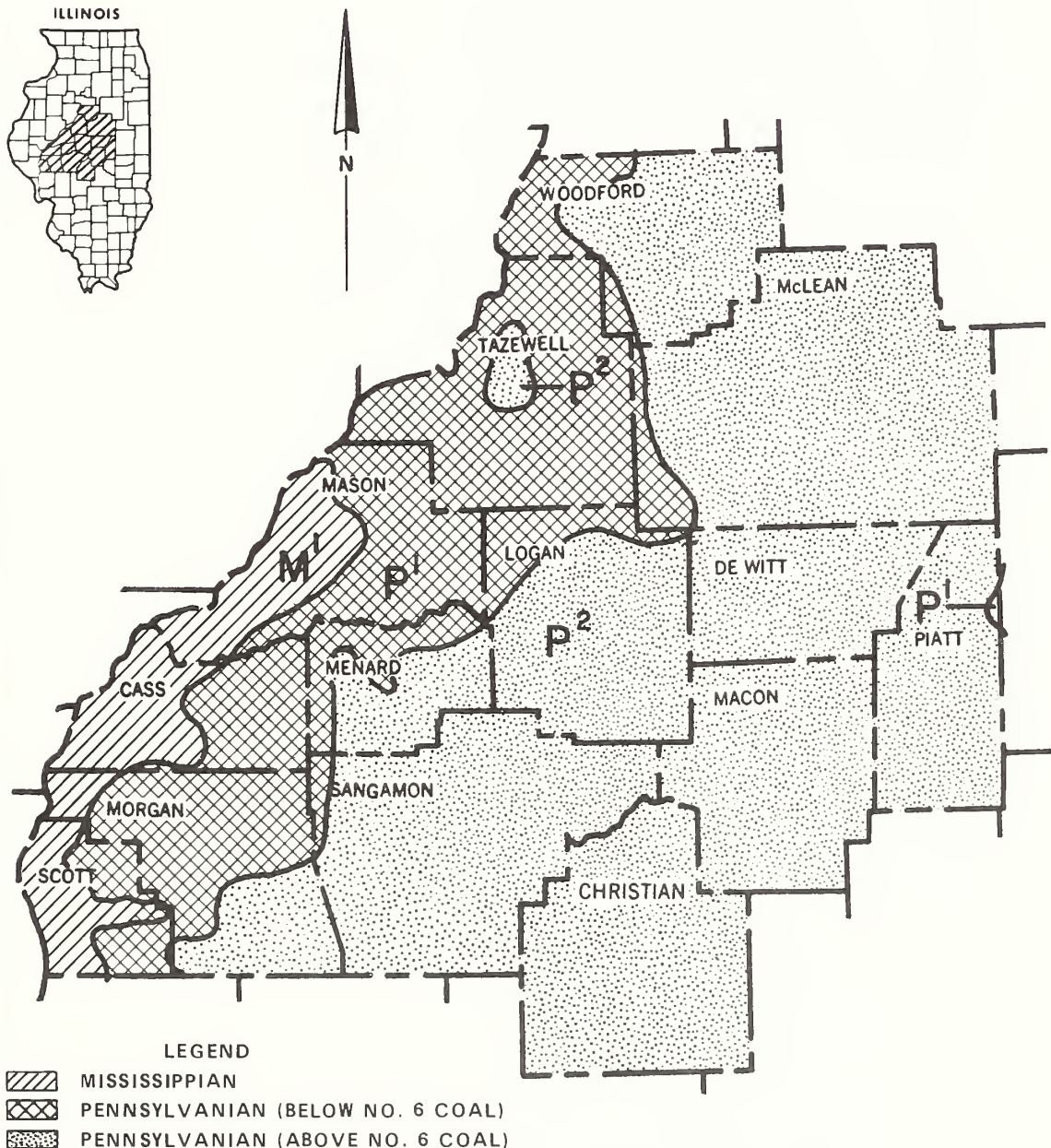
Domes and basins present in the various layers of bedrock formed traps in which oil pools accumulated. Known oil and gas fields are most common in the southeastern part of the resource area.

The northeastern part of the resource area is particularly rich in gravel and sand resources. Most of these resources are glacial deposits relatively close to the surface with a thin overburden. Reference to "The Geology of Surface Deposits" in Sec. I will better explain the origin and location of sand and gravel deposits.

Most of the surface mining in Central Illinois is for sand and gravel. Of the 1797 acres disturbed within the area, 1430 acres is mined for sand and gravel.

References: 1. Atlas of Illinois Resources, Section 2, "Mineral Resources."

BEDROCK BELOW GLACIAL DRIFT CENTRAL ILLINOIS RESOURCE AREA



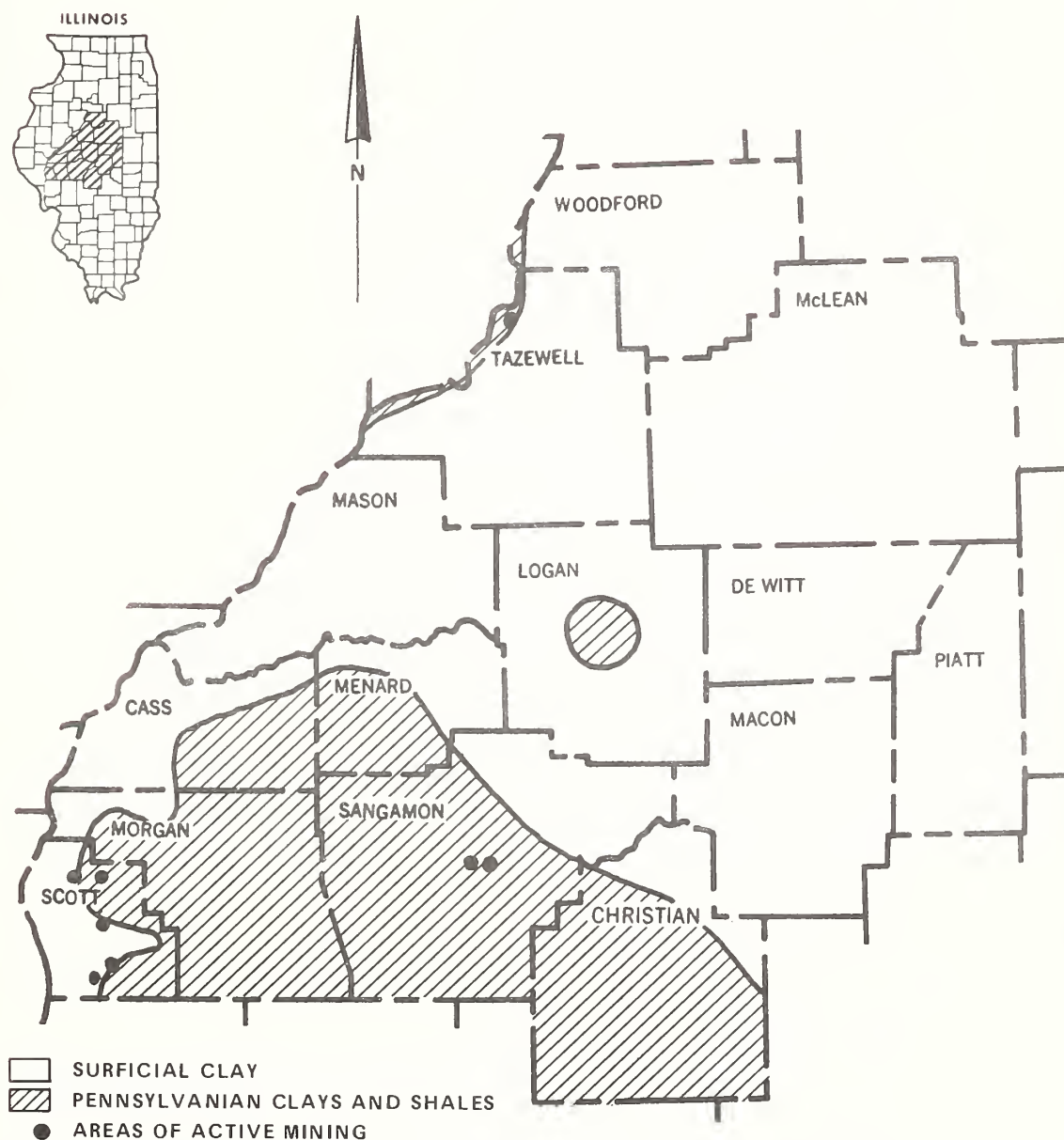
Source: Illinois State Geological Survey, Urbana.

SURFACE ACRES DISTURBED BY MINING

County	Coal	Clay	Sand & Gravel	Limestone	Total
Cass	--	--	--	--	--
Christian	--	--	--	40	40
DeWitt	--	--	75	--	75
Logan	--	--	275*	187*	462
McLean	--	--	161	--	161
Macon	--	--	125	--	125
Mason	--	--	--	--	--
Menard	--	3	--	58	61
Morgan	8	--	--	--	8
Piatt	--	--	15	--	15
Sangamon	--	40	151	--	191
Scott	2	13	--	7	22
Tazewell	--	9	603	--	612
Woodford	--	--	25	--	25

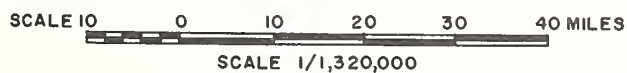
* As measured from unpublished Soil Survey of Logan County. 12/68

CLAY RESOURCES AND OPERATIONS CENTRAL ILLINOIS RESOURCE AREA

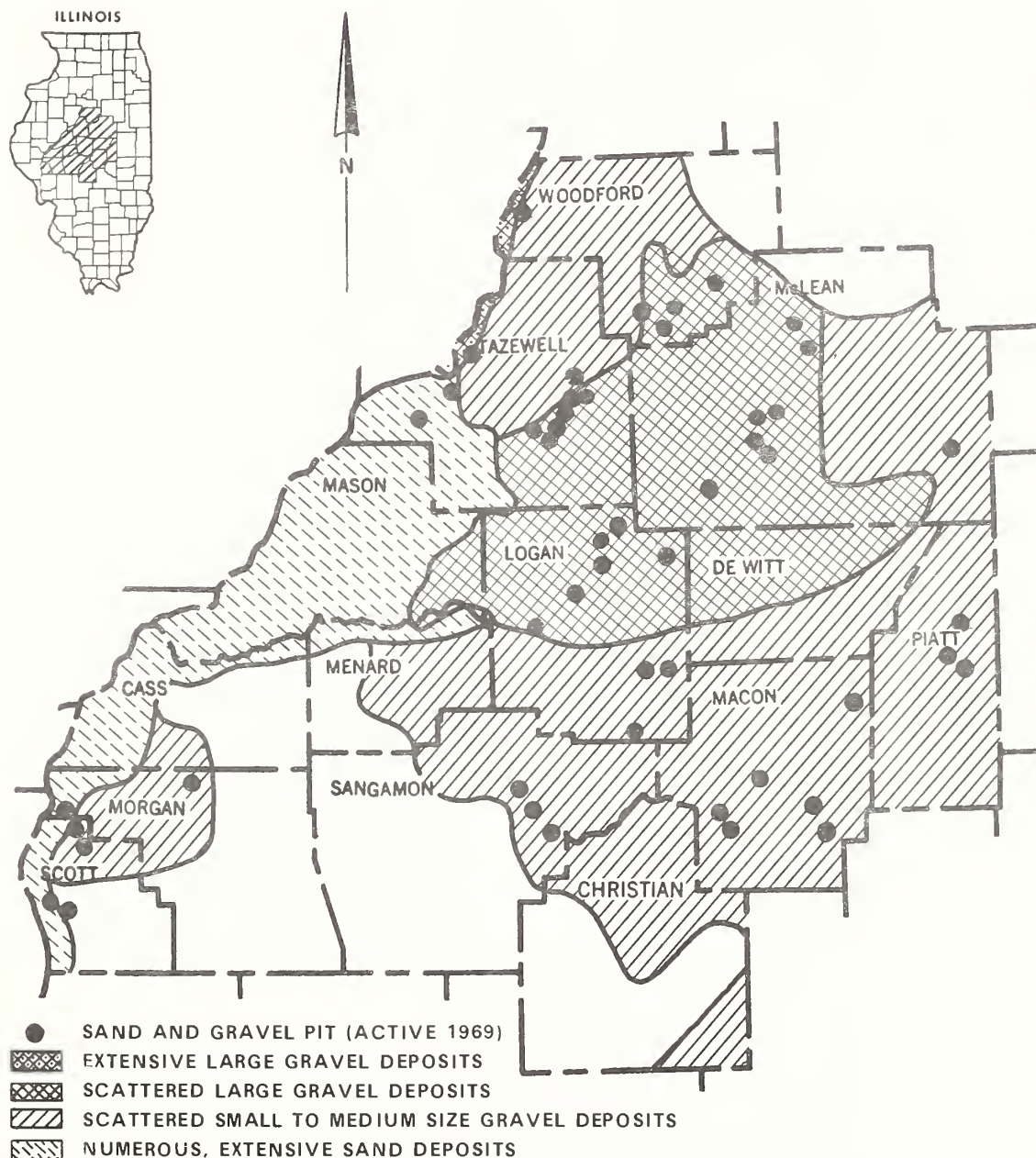


THE MANUFACTURE OF CLAY PRODUCTS IS THE PRIMARY MINERAL OUTPUT IN TAZEWELL, SANGAMON, AND SCOTT COUNTIES. THE MAJOR PRODUCT MANUFACTURED IS DRAIN TILE.

Source: Atlas of Illinois Resources, Sec. 2 plus data supplied by SCS Field Technicians.



SAND AND GRAVEL RESOURCES AND OPERATIONS CENTRAL ILLINOIS RESOURCE AREA



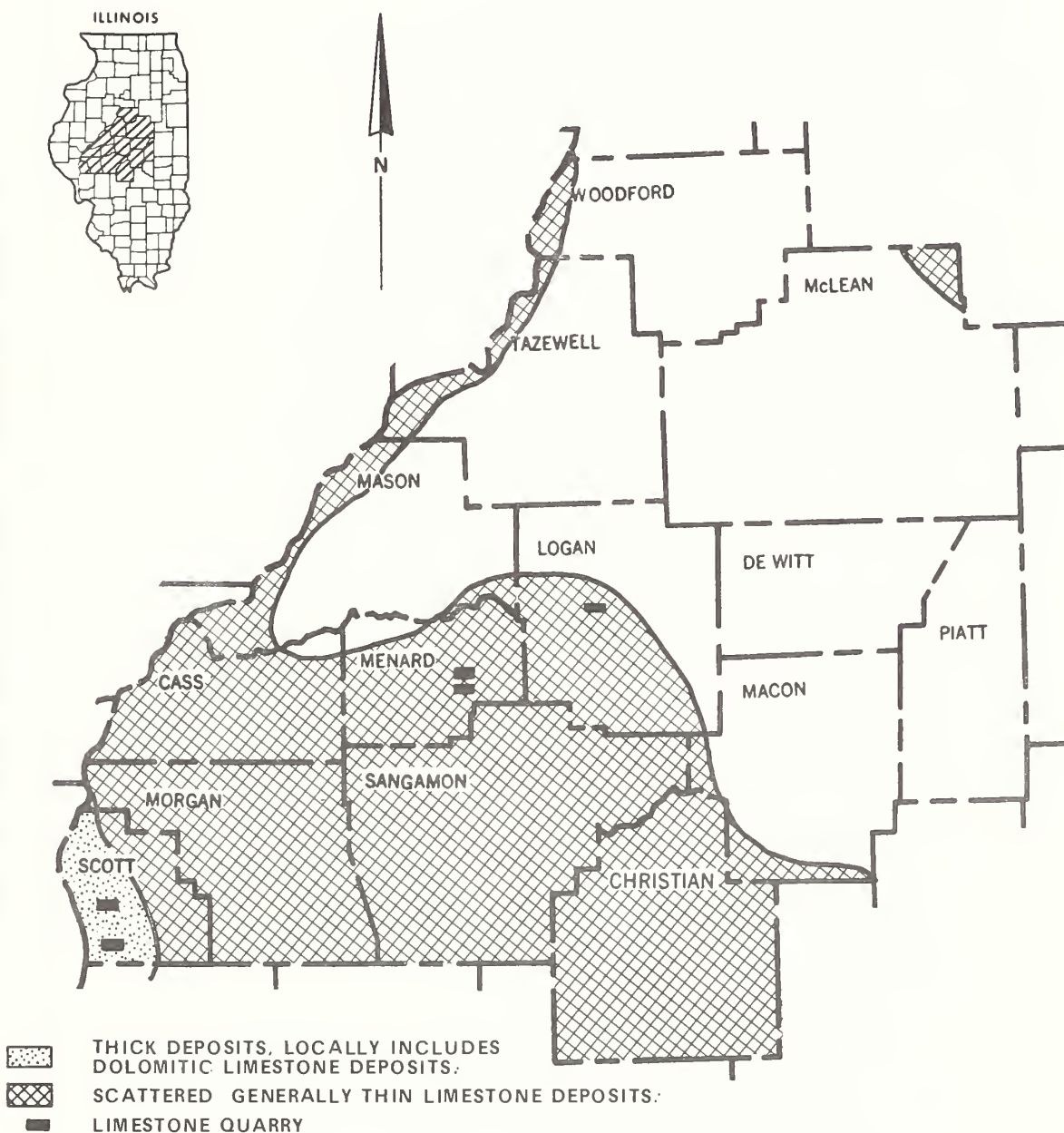
SAND AND GRAVEL MINING ACCOUNTS FOR A SUBSTANTIAL PART OF THE TOTAL MINERAL OUTPUT OF THE RESOURCE AREA. THEY ARE THE PRIMARY MINERALS IN McLEAN, WOODFORD, MACON, AND WOODFORD COUNTIES. MOST EXTENSIVE AREAS ARE ALONG LARGER STREAMS WHICH TRANSPORTED SAND AND GRAVEL FROM MELTING GLACIERS DURING PAST GLACIAL ACTIVITY.

Source: Mineral Economics Briefs 15 and 17 plus data furnished by SCS Field Technicians.

SCALE 10 0 10 20 30 40 MILES

SCALE 1/1,320,000

LIMESTONE RESOURCES AND OPERATIONS CENTRAL ILLINOIS RESOURCE AREA

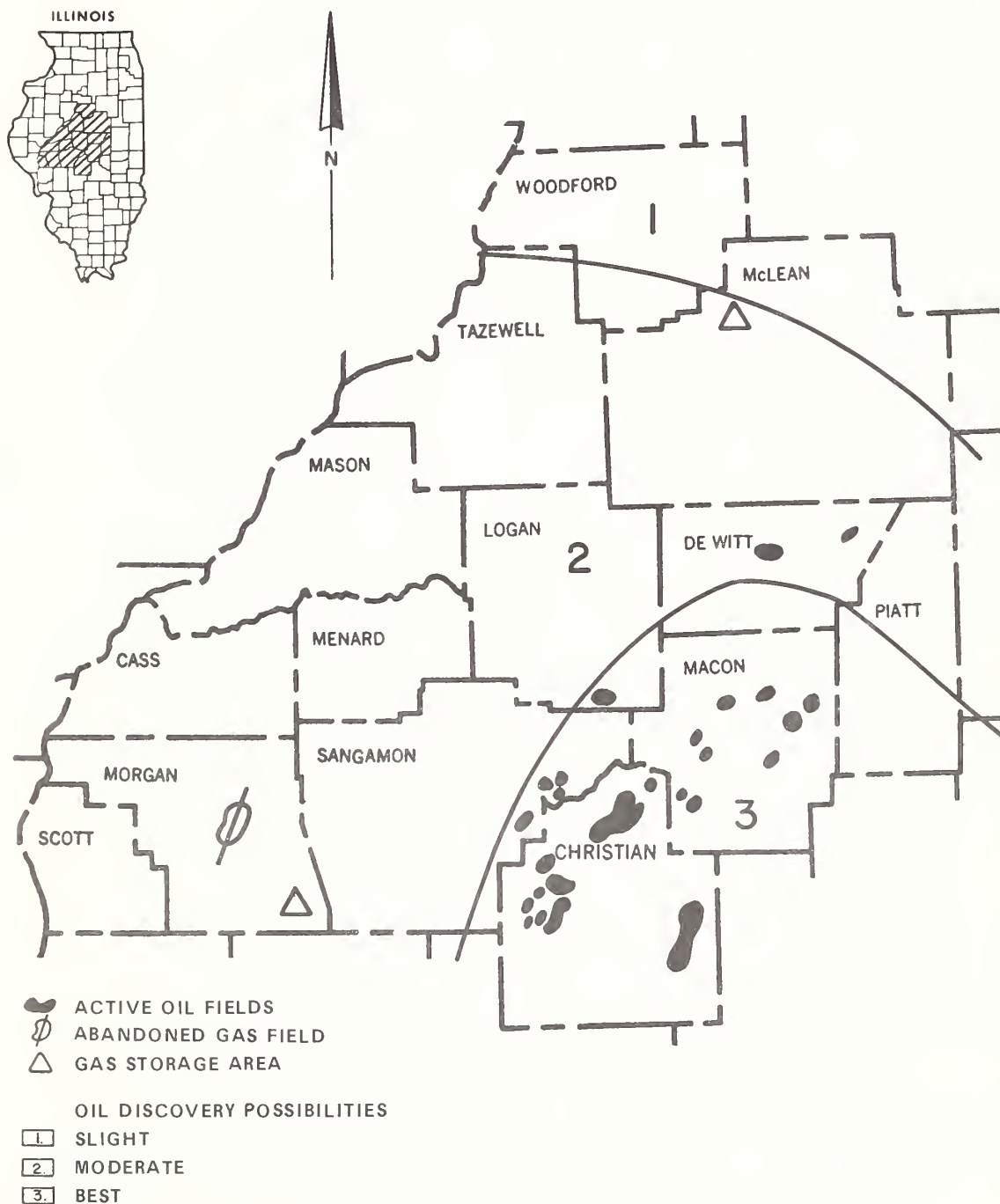


LIMESTONE PRODUCTS ARE AN IMPORTANT MINERAL RESOURCE IN CENTRAL ILLINOIS. THEY ARE THE PRIMARY MINERAL OUTPUT IN LOGAN AND MENARD COUNTIES AND ARE VERY IMPORTANT IN SCOTT COUNTY. PRIMARY PRODUCTS ARE AGRICULTURAL LIMESTONE AND CRUSHED STONE FOR ROADS.

Source: Atlas of Illinois Resources, Sec. 2 and Mineral Economic Briefs 15, 17, and 24.

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SCALE 1/1,320,000

OIL AND GAS FIELDS CENTRAL ILLINOIS RESOURCE AREA



Source: Atlas of Illinois Resources Sec. 2, page 19

SCALE 10 0 10 20 30 40 MILES

SCALE 1/1,320,000

SECTION V

LAND USE

CONTENTS

A. Public Ownership

1. Acres of Public Owned Land by Counties.
2. Map of Ownership.

B. Agriculture

1. Social and Economic Conditions
 - a. Social and Economic Data
 - b. Value of Farmland and Buildings
2. Trends in Row Crops, Small Grains and Hay Crops
(2 charts)
3. Livestock Trends

C. Wildlife Resources

1. Hunter Success - Table I
2. Hunting Pressure and Harvest - Table II

PUBLIC OWNERSHIP OF LAND BY COUNTIES - ACRES

	FEDERAL	STATE	COUNTY	CITY
Cass		4,520	80	80
Christian		3,500		400
DeWitt		120	160	
Logan		964	459	63
Macon		440	800	360
Mason	4,471	9,949		
McLean		1,352	380	2,835
Menard		500	250	
Morgan		455		1,879
Piatt		5,641	765	
Sangamon	35	392		11,000
Scott		3	40	
Tazewell	650	1,384	228	1,090
Woodford		680	240	756
Total	5,156	29,900	3,402	18,463





These figures do not include land within city limits or land in roads.

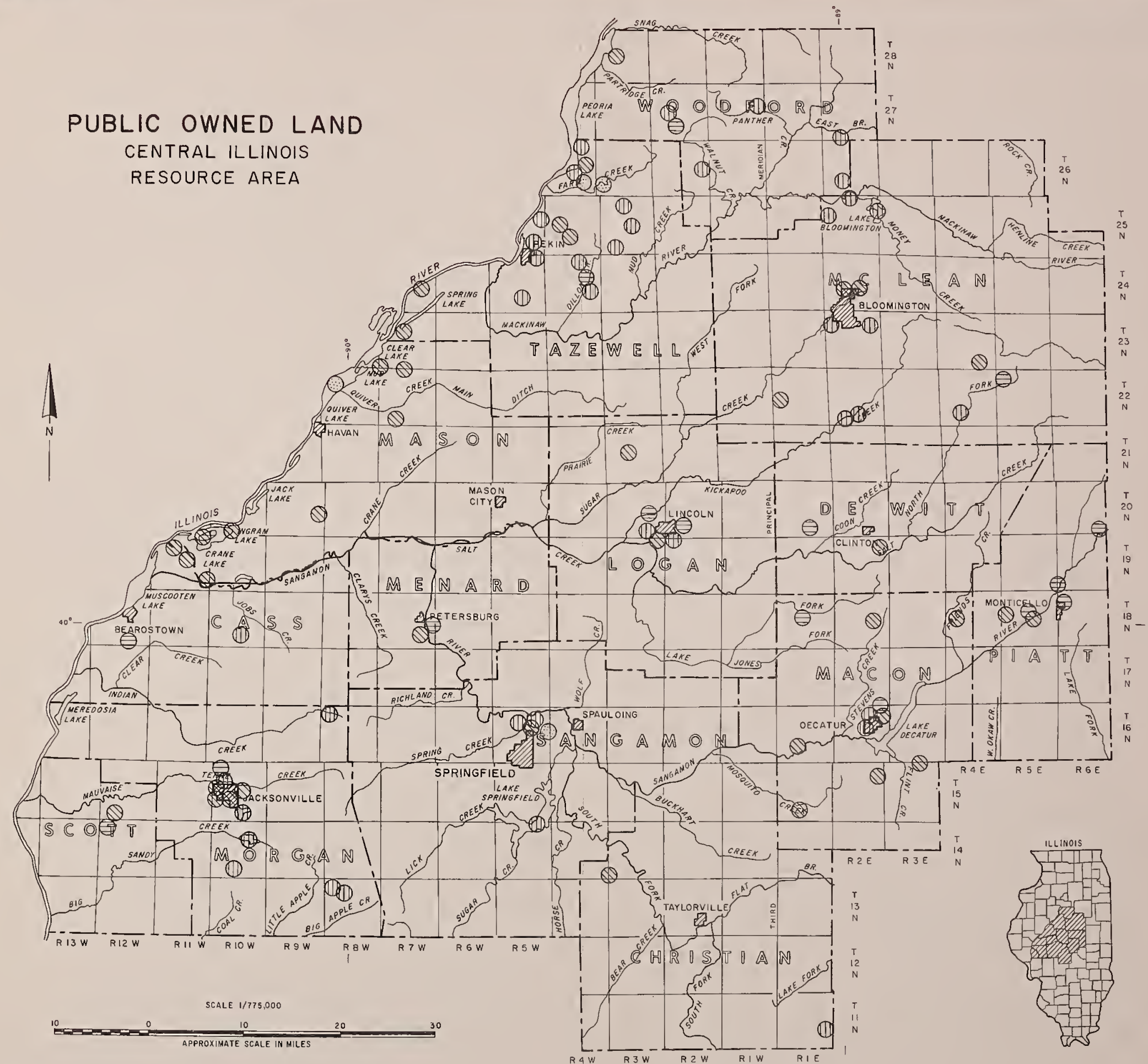
Of the 5,000,000 acres of land in the resource area approximately 1% is publicly owned land. Mason County with the Chautauqua Wildlife Refuge has the largest amount of federally owned land. Mason also has the largest amount of state owned land because of the state forest and wildlife refuges. Springfield with its airport authority and lake development has Sangamon County leading in city owned acreage.

Public ownership of land in the resource area totals 56,921 acres.

PUBLIC OWNED LAND CENTRAL ILLINOIS RESOURCE AREA

LEGEND

-  FEDERALLY OWNED
-  STATE OWNED
-  COUNTY OWNED
-  CITY OWNED



SOURCE:
SCS DRAWING 5,0-26831 AND
INFORMATION FROM FIELD TECHNICIANS
USDA SCS LINCOLN, NEBB 1971

LAMBERT CONFORMAL CONIC PROJECTION

SOCIAL AND ECONOMIC CONDITIONS
U.S.D.A. Agricultural Census 1964 & 1969

County	Average Size of Farm		Farm Operators		Number of Farm Operators Work- ing Off Farm	
	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>
Cass	305.8	323.0	641	531	269	291
Christian	276.0	284.6	1273	1108	482	683
DeWitt	264.6	279.4	818	640	365	463
Logan	269.1	282.8	1286	1038	514	628
Macon	254.6	265.2	1147	911	559	682
Mason	345.6	360.3	762	636	301	366
McLean	271.3	292.6	2330	1991	885	1202
Menard	306.4	302.6	532	455	187	266
Morgan	270.4	280.7	1135	932	437	569
Piatt	305.5	305.5	754	678	329	453
Sangamon	271.6	288.4	1557	1292	676	845
Scott	286.8	287.1	476	348	193	247
Tazewell	242.5	249.7	1338	1110	617	762
Woodford	235.9	236.0	1161	987	573	776

VALUE OF FARM LAND AND BUILDINGS

County	Value of Land & Building		Value of All Farm Products Sold		Average Value Per Farm of Land and Building	
	Average per acre		Average per farm		1964	1969
	1964	1969	1964	1969		
Cass	300.88	385.41	20,989	27,119	\$ 95,491	\$124,510
Christian	470.84	617.60	21,849	25,997	134,303	175,814
DeWitt	469.07	619.52	21,369	22,978	126,382	173,112
Logan	510.68	627.40	21,579	25,287	140,131	177,470
Macon	579.24	719.42	20,050	22,730	149,364	190,806
Mason	287.93	390.42	17,417	25,382	99,624	140,695
McLean	532.52	635.69	25,400	29,107	144,696	186,027
Menard	376.22	496.56	24,758	29,853	116,010	150,280
Morgan	379.53	496.64	18,731	26,181	101,990	139,436
Piatt	553.76	714.54	25,868	29,269	163,800	232,368
Sangamon	472.74	654.47	21,519	28,004	132,052	188,765
Scott	257.59	336.98	17,024	21,342	69,145	96,762
Tazewell	449.20	591.58	20,562	23,426	110,161	147,728
Woodford	499.74	616.17	21,880	25,079	117,586	145,464

TRENDS IN ROW CROPS, SMALL GRAINS AND HAY CROPS

County	Acres Corn		Acres Soybeans		Acres Oats For Grain	
	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>
Cass	60,851	69,276	45,963	51,444	1,998	1,890
Christian	136,012	150,909	125,256	148,669	2,788	1,684
DeWitt	90,545	90,897	67,393	78,782	7,109	3,345
Logan	142,190	159,258	91,747	110,954	15,585	10,099
Macon	122,105	134,872	107,509	111,858	4,217	2,884
McLean	309,049	329,617	155,045	213,563	33,484	15,792
Mason	89,558	95,232	65,446	70,334	2,915	9,123
Menard	60,428	69,649	49,977	47,678	2,507	1,634
Morgan	96,696	105,455	75,341	81,683	3,139	2,190
Piatt	97,554	113,760	87,751	98,939	4,604	2,141
Sangamon	168,226	197,407	133,404	151,507	5,656	3,234
Scott	40,478	36,329	29,017	31,394	808	368
Tazewell	146,244	163,087	59,725	68,277	10,457	6,693
Woodford	142,203	133,591	50,664	70,016	13,150	6,717

TRENDS IN ROW CROPS, SMALL GRAINS AND HAY CROPS

County	Acres Wheat		Acres All Hay		Acres Cropland not Harvested or Pastured	
	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>
Cass	20,740	12,867	8,441	5,030	14,790	20,885
Christian	46,943	26,276	9,145	5,068	25,380	44,260
DeWitt	10,380	3,601	9,176	4,966	19,418	26,195
Logan	27,092	11,111	19,410	7,805	31,961	39,005
Macon	29,016	12,229	6,787	3,519	24,153	32,466
McLean	24,214	4,354	34,619	14,316	51,911	69,504
Mason	33,705	23,484	9,688	5,553	27,493	37,262
Menard	16,079	8,624	6,605	3,515	11,644	17,738
Morgan	31,301	17,756	11,826	8,227	21,919	28,734
Piatt	19,156	8,563	7,834	2,702	23,043	27,937
Sangamon	42,972	18,342	16,228	8,578	27,881	38,209
Scott	14,691	9,106	4,906	3,671	10,966	17,635
Tazewell	26,009	11,635	18,198	9,377	21,852	32,668
Woodford	9,419	2,997	19,101	9,317	17,540	34,536

LIVESTOCK TRENDS

County	Cattle Sold (Hd.)		Hogs Sold (Hd.)	
	<u>1964</u>	<u>1969</u>	<u>1964</u>	<u>1969</u>
Cass	17,997	14,215	91,270	104,171
Christian	21, 214	14,166	110,689	79,589
DeWitt	13,512	11,387	54,005	34,548
Logan	21,613	15,231	85,985	65,334
Macon	12,898	7,743	46,136	29,855
McLean	64,435	44,867	235,177	175,879
Mason	10,405	8,818	51,824	39,892
Menard	17,812	14,451	84,187	84,645
Morgan	27,673	27,107	182,069	195,750
Piatt	12,821	9,277	45,363	33,545
Sangamon	27,303	24,957	170,691	152,182
Scott	8,383	7,897	98,327	88,817
Tazewell	24,266	16,724	128,541	100,897
Woodford	33,277	27,880	142,318	93,651

WILDLIFE RESOURCES

CENTRAL ILLINOIS RESOURCE AREA

All major game species hunted in Illinois are found in this resource area. These are pheasants, quail, mourning doves, waterfowl, white-tailed deer, squirrels and rabbits. Other wildlife resources include fur animals and predators such as foxes, raccoons, mink and muskrat; woodcock, snipe, herons and other shorebirds and wading birds; and a great variety of interesting and useful songbirds.

The most heavily populated pheasant range in Illinois extends into this resource area. The area as a whole supports almost one-fourth of the statewide pheasant hunting pressure and contributed 24 percent of the kill in the 1970 hunting season. McLean and Logan Counties had the highest kills and heaviest hunting pressure.

Ducks furnish the bulk of waterfowl hunting in the Area, the goose kill being relatively light. As would be expected, duck hunting is best in the Illinois River Counties -- Woodford, Tazewell, Mason and Cass.

With the exception of quail, upland game population as measured by hunter success, equal or exceed state averages. Although some counties have good numbers of quail, the intensively farmed prairie areas lower the average population.

While not numerous in comparison with some sections of the state, deer are present in all counties and were hunted in 11 counties during the 1970 season. These 11 counties contributed 5.6 percent of the statewide deer kill in 1970. Kill in individual counties ranged from 21 in Morgan County to 79 in Mason County. Area kill totalled 513 deer.

Relative abundance and importance of wildlife in Central Illinois compared to the state as a whole are shown by data presented in the accompanying tables. These data are taken from results of the 1970 hunting season. Table I shows hunting success rates. Table II shows the contribution by Central Illinois toward statewide hunting pressure and wildlife harvest.

TABLE I -- HUNTER SUCCESS - CENTRAL ILLINOIS RESOURCE AREA

Species	Central Illinois Resource Area		Statewide	
	Average Kill Per Hunt	Average Season Kill Per Hunter	Average Kill Per Hunt	Average Season Kill Per Hunter
Pheasant	.72	3.1	.68	2.7
Squirrel	1.79	9.6	1.77	9.7
Mourning Dove	4.14	16.2	3.89	17.4
Bobwhite Quail	1.66	7.2	2.23	10.8
Rabbit	1.34	6.1	1.24	5.2
Fox	.45	1.1	.37	1.5
Raccoon	1.3	6.6	1.3	10.3

TABLE II -- HUNTING PRESSURE AND HARVEST
CENTRAL ILLINOIS RESOURCE AREA

Species	Percent of Total State Hunting Pressure in This Area	Percent of Total State Harvest in This Area
Pheasants	22.6	24.0
Rabbits	14.9	16.0
Mourning Dove	12.9	13.6
Squirrels	14.3	14.4
Bobwhite Quail	15.2	11.3
Raccoon	7.8	7.5
Fox	10.5	10.7
Ducks	17.7	23.2
Geese	6.5	4.6

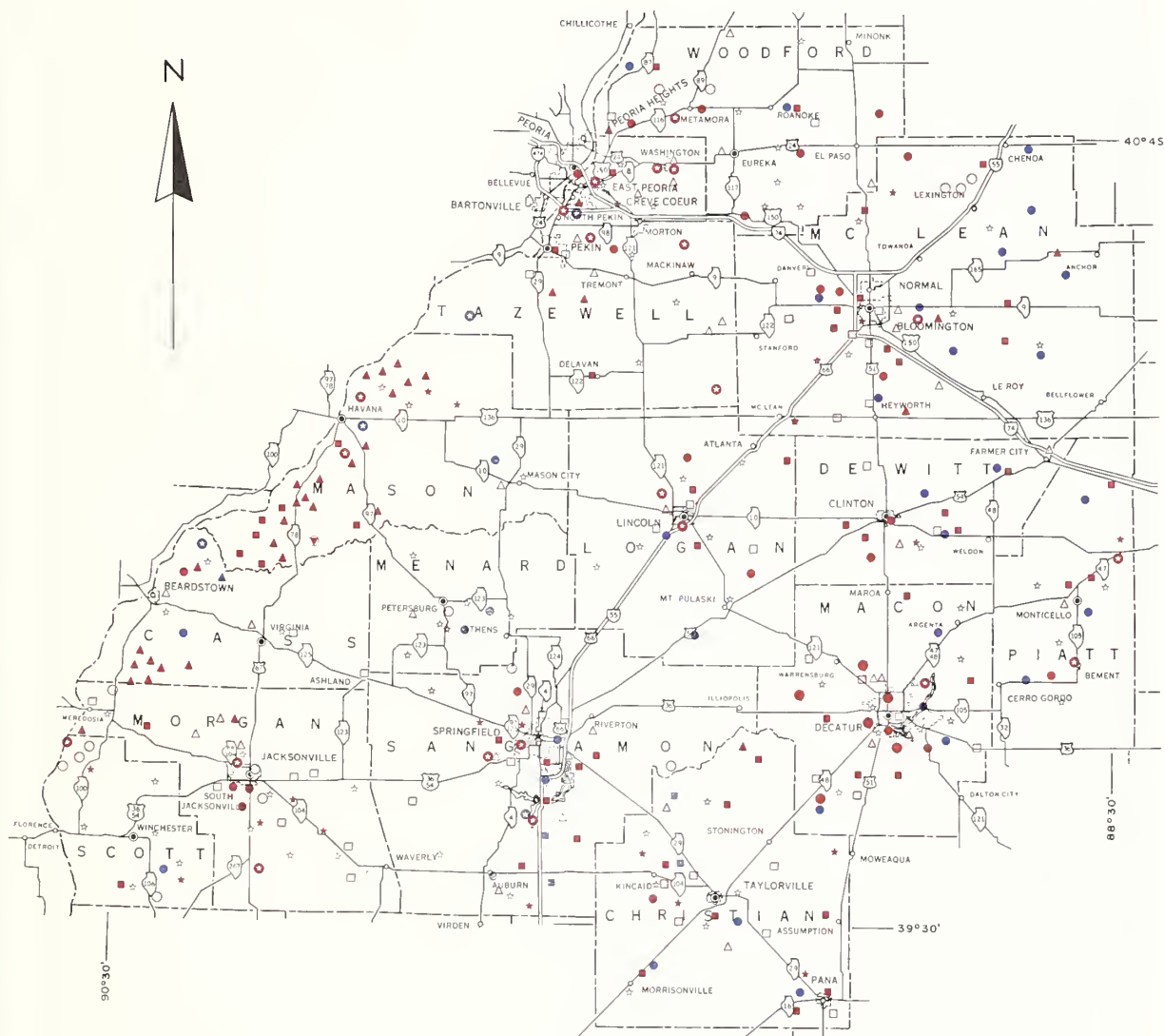
SECTION VI
RECREATION ENTERPRISES

CONTENTS

- A. Guide To Recreational Facilities - Map
- B. Guide to Recreational Facilities by
County - Tables

GUIDE TO RECREATIONAL FACILITIES

CENTRAL ILLINOIS



LOCATION IN ILLINOIS

LEGEND

FACILITIES	PUBLIC	PRIVATE
Cabins	○	○
Camping Grounds, or Picnic	●	●
Field Sports	□	□
Fishing Waters	■	■
Golf Course Area	△	△
Hunting Areas	▲	▲
Natural, Historic and Scenic	☆	☆
Riding Stable	★	★
Vacation Farms	✧	✧
Water Sports	⊙	⊙

SOURCE
SCS DRAWING NO. 5, R-21,666 AND
INFORMATION FROM FIELD TECHNICIANS

LAMBERT CONFORMAL CONIC PROJECTION

SCALE 10 0 10 20 30 MILES

SCALE 1/1,285,000

8-19-69
5,0-27,568

GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

CASS COUNTY

NAME OF AREA	SIZE (ACRES)		CAMPING SITES - NO.		BOATING		SWIMMING		WATER SKIING		FISHING		REST ROOMS		HIKING		HISTORICAL SITE		MINIATURE GOLF		HUNTING - WATERFOWL		HUNTING - BIG GAME		ARCHERY		CABINS		PRIVATELY OWNED		COUNTY OWNED		STATE OWNED		FEDERAL OWNED		LOCATION OF ADDRESS
Virginia Waterworks Lake	40	15																																			Virginia, Illinois
Sanganois Game Preserve	6989	4100	X								X	X								X																X	Broming, Illinois
Beardstown Park District	27																																				Beardstown, Illinois
Virginia Country Club																																					Virginia, Illinois
Golf Driving Range																																					Beardstown, Illinois
Go-Cart																																					Ashland, Illinois
Matty Marion Old River Gun Club	30	30																																			Beardstown, Illinois
Walker-Ernest Club	40	10																																			
Topper Hole Club	160	16																																			
Tredway Gun Club	1340	350																																			
Clear Lake Club	150	10																																			
Knoxville Gun Club	600	250																																			Beardstown, Illinois
Schlyer Gun Club	160	95																																			Knoxville, Illinois
Bushnell Gun Club	300	150																																			Elmhurst, Illinois
Lilly Lake Rod & Gun Club	500	200																																			Bushnell, Illinois
Honey Point Rod & Gun Club	400	100	X																																		Girard, Illinois
Logsdon Gun Club	400	150	X																																		Meredosia, Illinois
Rock Island Gun Club	300	25	X																																		Beardstown, Illinois
Meredosia Bay Club	350	60	X																																		
Chapin Gun Club	60	10																																			Arenzville, Illinois
Hans Gun Club	60	30																																			Astoria, Illinois
Pioneer Gun Club	70	60																																			Rushville, Illinois
Sand Point Gun Club	70	35	X																																		Chaptn, Illinois
Astoria Gun Club	120	60																																			Astoria, Illinois
Indian Creek Club	50	50																																			Springfield, Illinois
Allen Gun Club	265	10																																			
Turner Gun Club	35	10																																			Beardstown, Illinois
Maywood Gun Club	30	10																																			Metrose Park, Illinois
Beardstown Game Club	2000																																				Chandlerville, Illinois
James L. Brown	64	20	X																																		Beardstown, Illinois
Wm. Wilkens	80	40																																			Beardstown, Illinois
Klupe Willows Gun Club	80	10																																			Beardstown, Illinois

CHRISTIAN COUNTY

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GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

DEWITT COUNTY

NAME OF AREA	SIZE (ACRES)	WATER (ACRES)	CAMPING SITES	BOATING	SWIMMING	WATER SKIING	FISHING	REST ROOMS	HIKING	HISTORICAL SITE	MINIATURE GOLF	HUNTING - WATERFOWL	HUNTING - SMALL GAME	HORSEBACK RIDING	ARCHERY	CABINS	OWNERSHIP				LOCATION OF ADDRESS
																	PRIVATELY OWNED	CITY OWNED	COUNTY OWNED	STATE OWNED	
Weldon Springs State Park	119.96	28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Weldon, Illinois	
John Gibson	4	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
C. D. Lynn	20	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	DeWitt, Illinois	
C. W. Shinneman	5	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Little Galilee Church Camp	140	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Clinton Country Club	160		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Woodlawn Country Club	65		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Summer Haven Swim Club			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Farmer City, Illinois	
C. G. Banta		1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
DeWitt County Sportsman Club	35		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Town & Country Riding Club	7		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Anglers Club	5	1½	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Clinton, Illinois	
Jintown Gun Club	5		X																	Wapella, Illinois	
</																					

LOGAN COUNTY

USDA-SCS-LINCOLN NEBR. 1969

GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

MACON COUNTY

NAME OF AREA	SIZE (ACRES)	CAMPING SITES - NO.	BOATING	WATER SKIING	FISHING	REST ROOMS	HIKING	HISTORICAL SITE	MINIATURE GOLF	HUNTING - WATERFOWL	HUNTING - BIG GAME	ARCHERY RIDING	CABINS	LOCATION OF ADDRESS			
														PRIVATELY OWNED	CITY OWNED	COUNTY OWNED	FEDERAL OWNED
Southside Country Club	145		X					X						X			Decatur, Illinois
Decatur Country Club	130		X			X		X						X			Decatur, Illinois
Cresthaven Country Club	20		X					X						X			Decatur, Illinois
Blue Mound Swim Club	5		X											X			Blue Mound, Illinois
Larkdale Swim Club	5		X											X			Decatur, Illinois
Holiday Park Swim Club	5		X											X			Decatur, Illinois
Sun & Fun	40		X			X								X			Decatur, Illinois
Sun Valley Swim Club	5		X			X								X			Decatur, Illinois
Surf Club	6		X			X								X			Decatur, Illinois
Niantic Swim Club	10		X			X								X			Niantic, Illinois
Girl Scout Camp	55	X				X								X			Decatur, Illinois
Blue Mound Archery Club	14									X				X			Blue Mound, Illinois
Camp Robert Paries	60	X	X			X	X							X			Decatur, Illinois
Shepherd Fish Pond	20	2		X										X			Decatur, Illinois
Collins Fish Pond	10	1		X										X			Edwin, Illinois
Williams Fish Pond	5	1												X			Edwin, Illinois
Warrensburg Gun Club	5													X			Maroa, Illinois
Falcon Lake	20	1		X										X			Heman, Illinois
Shepherd's Lake	1													X			Oakley, Illinois
Macoon Speedway	5													X			Decatur, Illinois
La Place Go-Cart Track														X			Macoon, Illinois
Miniature Golf	1								X					X			La Place, Illinois
Lincoln Trail Homestead St. Park	162	X	X	X		X	X							X			Decatur, Illinois
Spittler Woods State Park	202.50	X	X	X		X								X			Decatur, Illinois
Decatur Park District	1457		X	X		X		X						X			Mt. Zion, Illinois
Illini Twp. Park District	3			X		X								X			Decatur, Illinois
																	Warrensburg, Illinois

GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

MCLEAN COUNTY

NAME OF AREA	SIZE (ACRES)	WATER (ACRES)	CAMPING SITES - NO.	BOATING SITES	SKINNING	WATER SKIING	FISHING	REST ROOMS	HIKING	HISTORICAL SITE	MINIATURE GOLF	HUNTING - WATERFOWL	HUNTING - BIG GAME	ARCHERY	CABINS	OWNERSHIP				LOCATION OF ADDRESS
																PRIVATELY OWNED	CITY OWNED	COUNTY OWNED	FEDERAL OWNED	
McLean County Conservation Area	759.5	188	X			X											X		Ellsworth, Illinois	
John Smith RFD #2	20	1				X											X		LeRoy, Illinois	
Prairie Lakes	10	2				X		X									X		Downs, Illinois	
Jolly's Lake	10	2	X			X		X									X		R. R. #4, Bloomington, Illinois	
Stubblefield Stables	70											X					X		McLean, Illinois	
Carr's Stables	60											X					X		Hudson, Illinois	
Bloomington Gun Club	37																X		Covell, Illinois	
Bloomington Music & Golf Club	15							X					X				X		R. R. #2, Bloomington, Illinois	
Funk's Grove	30								X								X		McLean, Illinois	
McGrath's Gravel Pit	10	9				X											X		Bloomington, Illinois	
Lacca Forest	10					X		X									X		Bloomington, Illinois	
Nob Hill Lake	15	2				X		X									X		R. R. #3, Bloomington, Illinois	
Evergreen Bowhunter Club	40			X									X				X		Bloomington, Illinois	
Bloomington Country Club	40			X						X							X		Bloomington, Illinois	
Lakeside Country Club	30			X						X							X		Bloomington, Illinois	
Baird's Riding Stable	20											X					X		Bloomington, Illinois	
Boy Scouts Camp	150	40	X	X	X	X		X					X				X		Hudson, Illinois	
Girl Scouts Camp	80	40	X	X	X	X		X					X				X		Hudson, Illinois	
East Boy's Camp	117	40	X		X	X		X									X		Hudson, Illinois	
Four Season's Club	10			X													X		Bloomington, Illinois	
Angler's Club	30	3				X											X		LeRoy, Illinois	
Tri-Lakes Conservation & Reserv. Club	20	5			X	X											X		Bloomington, Illinois	
Kickapoo Game Preserve	320											X					X		Bloomington, Illinois	
Colfax Hunting Club, Inc.	960											X					X		Bloomington, Illinois	
Jone's Lake	15	5															X		Hudson, Illinois	
Kickapoo Playground	17	1				X		X									X		Heyworth, Illinois	
McLean County Land-Fill, Inc.	50	40															X		Bloomington, Illinois	
Robert Anderson	17	2				X		X									X		Heyworth, Illinois	
Rome's Fishing Lake	15	2				X											X		Bloomington, Illinois	
Geuntheidt Party House	7					X											X		R. R. #3, Bloomington, Illinois	
West Park, West Township	20					X											X		LeRoy, Illinois	
Milton Bros. Game Preserve	640											X					X		Heyworth, Illinois	

MCLEAN COUNTY

[illegible]

BENARD COUNTY

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GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

MASON COUNTY

NAME OF AREA	SIZE (ACRES)	CAMPING SITES - NO.	SWIMMING	WATER SKIING	BOATING SITES - NO.	FISHING	REST ROOMS	HIKING	HISTORICAL SITE	MINIATURE GOLF	HUNTING - SMALL GAME	HUNTING - BIG GAME	HORSEBACK RIDING	ARCHERY	CABINS	OWNERSHIP				LOCATION OF ADDRESS
																PRIVATELY OWNED	CITY OWNED	STATE OWNED	FEDERAL OWNED	
Havana Field Hdqrs. Ill. Dept. of Con.	3.5				X		X	X										X		Havana, Illinois
Mason State Forest	5524						X										X			Manito, Illinois
Mason City Comm.	4				X		X													Mason City, Illinois
Alvin Storer	1000				X		X										X			Havana, Illinois
Rudolph Diether	169	20			X						X									Havana, Illinois
Ida Hahn	45	10									X									Bath, Illinois
Red Leg Duck Club	134	20									X									Havana, Illinois
Ralph Siltman	10	10																		Bath, Illinois
Marjorie Bonnett	15	10									X									Havana, Illinois
Wildlife Acres Farm	50	20	X								X									Havana, Illinois
Wangold Golf Course	45	0							X											Oakford, Illinois
Rickett Stables	20	0																		Mason City, Illinois
Lane Vacation Farm	960											X								Forest City, Illinois
Cordon Bauer Rodeo	40																			Chandlerville, Illinois
Lakewood Supper Club	300	200								X										Topeka, Illinois
Loganberry Lodge	1400									X										Havana, Illinois
Bean's Boatyard	1000		X		X					X										Decatur, Illinois
Charles D. Walker	5	3								X										Havana, Illinois
Pete Rudolph Hunting Club	20									X										Havana, Illinois
John McCarty	40									X										Havana, Illinois
Edward F. Cullinane	200	5																		Havana, Illinois
J. W. McHarry	1000									X										Havana, Illinois
Taylor & Blank Club	30	5	X							X										Havana, Illinois
Marten's Hunting Club	37	18								X										Havana, Illinois
Mike Basso Club	100		X																	Chandlerville, Illinois
Fannie Martin (Patterson Bay)	70	X	X																	Bath, Illinois
Davidemeyer Club	650	180	X							X	X									Bath, Illinois
Grand Island Lodge	4600	2800	X							X	X									Bath, Illinois
Snicarte Island Lodge	720	320								X	X									Bath, Illinois
John K. Fletcher Farm	170		X							X	X									Bath, Illinois
Crane Lake Club	3000	2600	X							X	X									Bath, Illinois
Central Illinois Hunting Club	2200	1800								X	X									Bath, Illinois

MASON COUNTY

[illegible]

MORGAN COUNTY

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PIATT COUNTY

[illegible]

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GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

SANGAMON COUNTY

NAME OF AREA	SIZE (ACRES)	CAMPING (ACRES)	BOATING (ACRES)	SKIMMING	WATER SKIING	FISHING	REST ROOMS	HIKING	HISTORICAL SITE	GOLF	MINIATURE GOLF	HUNTING - SMALL GAME	HUNTING - BIG GAME	HORSEBACK RIDING	CABINS	PRIVATELY OWNED	CITY OWNED	STATE OWNED	FEDERAL OWNED	LOCATION OF ADDRESS
Lincoln Tomb State Memorial	12.40									X								X		Springfield, Illinois
Lincoln Home State Memorial	.42									X								X		Springfield, Illinois
State Conservation & Education	40	1.4																X		Springfield, Illinois
Springfield Park District	984		X				X				X									Springfield, Illinois
Auburn Park	2	.5					X											X		Auburn, Illinois
Loami Park	6	4.5					X											X		Loami, Illinois
New Berlin Park	5	4					X											X		New Berlin, Illinois
J. E. McGrath	130	10.5	X				X					X						X		R.F.D. New Berlin, Illinois
James Steak	15																			R.F.D. Pawnee, Illinois
Hill Top Stables	20											X						X		Springfield, Illinois
Jundi Farm Stables	18											X						X		Springfield, Illinois
Oakcrest Country Club	150											X						X		Springfield, Illinois
Illini Country Club	130											X						X		Springfield, Illinois
Edgewood Country Club	80	1.8					X											X		Auburn, Illinois
Nathans Gun Club	40																	X		Springfield, Illinois
Left Handers Gun Club	30	1.5					X											X		Loami, Illinois
Camp Cilca-Lutheran Church	159	10.6					X											X		Dawson, Illinois
Nazarene Acres	38	.8																X		Rochester, Illinois
Harold M. Schroll	20	7	X				X											X		Springfield, Illinois
Boy Scouts - Camp Illini	71		X	X														X		Springfield, Illinois
Boy Scouts - Camp Sangamo	67		X															X		Springfield, Illinois
Lake Springfield Baptist Camp	51		X				X											X		Springfield, Illinois
YMCA	27						X											X		Springfield, Illinois
Boys Club	5		X	X	X	X												X		Springfield, Illinois
Camp Widdiwagon	72	X	X	X														X		Springfield, Illinois
Camp Star of the Sea	12																	X		Springfield, Illinois
Peers Club	4		X	X	X													X		Springfield, Illinois
Sangamo Surf Club	7		X	X	X													X		Springfield, Illinois
Postal Club	6		X	X	X													X		Springfield, Illinois
Aqua Sports Club	3		X	X	X													X		Springfield, Illinois
D.A.V. Club	3		X	X	X													X		Springfield, Illinois
Rod & Reel Club			X	X	X													X		Springfield, Illinois

GUIDE TO RECREATIONAL FACILITIES
CENTRAL ILLINOIS

TAZEWELL COUNTY

NAME OF AREA	SIZE (ACRES)		FACILITIES										OWNERSHIP				LOCATION OF ADDRESS	
	WATER	CAMPING SITES - NO.	BOATING	SWIMMING	TABLES - SKIING	FISHING - SHELTER	REST ROOMS	HIKING	HISTORICAL SITE	MINIATURE GOLF	HUNTING - WATERFOWL	HUNTING - BIG GAME	HORSEBACK RIDING	CABINS	PRIVATELY OWNED	CITY OWNED		STATE OWNED
Spring Lake State Park	1583	1285	X	X	X	X	X									X		Manito, Illinois
Pekin Park District	1600			X	X				X							X		Pekin, Illinois
Delavan Park District	25															X		Delavan, Illinois
Fon Du Lac Park District	522															X		East Peoria, Illinois
South Pekin Park District	2															X		South Pekin, Illinois
Morton Park District	300			X												X		Morton, Illinois
Tazewell Fairdale Rec. Area	1421							X										Washington, Illinois
Washington City	11.5			X												X		Creve Coeur, Illinois
St. Creve Coeur	86				X			X	X									Pekin, Illinois
Pekin Lake Conservation Area	1300	900	X	X	X					X						X		Morton, Illinois
Pine Lakes Golf Course	160	6		X	X	X				X						X		Morton, Illinois
Harold Kuhfuss	37																	Morton, Illinois
Henry Friederich	200	3														X		Morton, Illinois
Larry's Fish Ranch	30	18			X											X		Delavan, Illinois
Will Moore's Sportsmen	80	11			X						X					X		Pekin, Illinois
Dixon's Fishing	30	18			X											X		E. Peoria, Illinois
Pekin Rod & Gun Club	750	680			X				X							X		Pekin, Illinois
Kennel Lake Sportsmen Club	17	12	X	X	X					X						X		Morton, Illinois
Minier Sportsmen Club	60	9			X											X		Minier, Illinois
Pekin Country Club	90	2		X						X						X		Pekin, Illinois
Illinois Valley Parachute	10															X		Pekin, Illinois
Twin Lake's Swimming Beach	12	9		X												X		North Pekin, Illinois
Hill Crest Golf Center	60	8		X	X				X							X		Washington, Illinois
Pekin Lake Club	250	190			X						X					X		Pekin, Illinois
Pendola's Boat & Fishing			X		X											X		E. Peoria, Illinois
Sunset Hill's Co. Club	250		X	X	X				X							X		Pekin, Illinois
Neptune Swimming Club	10		X	X						X						X		Washington, Illinois
Peoria Sportsman Club			X	X	X											X		Manito, Illinois
Pekin Riding Club																X		Pekin, Illinois
Girl Scout Camp					X			X								X		R. R. Pekin, Illinois
Pekin Boat Club			X													X		Pekin, Illinois

WOODFORD COUNTY

USDA-SCS-LINCOLN, NEBR. 1969

SECTION VII
WATER MANAGEMENT AND FLOOD CONTROL

CONTENTS

- A. Watersheds - Status and Planning
- B. U. S. Army Corps of Engineers Projects

WATER MANAGEMENT AND FLOOD CONTROL

A. Watersheds - Status and Planning

Clear Creek Watershed

The Clear Creek Watershed in Cass County involving 26,000 acres, was authorized for operations on October 9, 1970. Sponsors are Clear Creek Special Drainage District and Cass County Soil and Water Conservation District. Principal problems are sheet and gully erosion, sediment damage, floodwater damage and drainage.

The works of improvement to be installed are land treatment measures and structural measures. The sponsors are currently pursuing ways and means to acquire land rights for the structural measures.

Long Point Slough Watershed

The application for Long Point Slough located in Macon, Sangamon, and Christian Counties has been approved. A preliminary investigation report will be prepared as the next step. Sponsors are the Soil and Water Conservation Districts of Macon, Christian, Sangamon and Logan Counties. Approximately 40,000 acres are involved.

Kickapoo Creek Watershed

This watershed was determined to be economically feasible as a PL 566 project in 1968.

The 212,900 acres watershed is located in McLean, Logan and DeWitt Counties. Planning was discontinued in late 1970 at the request of the sponsors who were unable to form a legal entity to raise funds for local costs.

Apple Creek Watershed

This watershed is located in Morgan, Scott, Sangamon, Macoupin and Green Counties. Planning was discontinued in 1971 because an economically feasible PL 566 project could not be developed under current criteria.

Eight additional watersheds in the Central Illinois Resource Area for which local people have expressed an interest have been studied and found not feasible under current criteria.

B. U.S. Army Corps of Engineers Projects

This Resource Area is serviced through both the North Central Division, Chicago District and the Mississippi Valley Division, St. Louis District offices of the Corps of Engineers.

The U.S. Army Corps of Engineers is the oldest and first Federal agency to be delegated responsibilities in water resources by Congress. The Corps has been authorized by Congress to investigate, plan or construct and maintain several navigation, and flood control projects as shown on the following map. For a brief description of the individual projects see "Water Resources Development" by the U.S. Army Corps of Engineers in Illinois, published by U.S. Army Engineer Division, North Central, Chicago, Illinois, January 1965.

U.S. ARMY
CORPS OF ENGINEERS PROJECTS
IN
CENTRAL ILLINOIS
RESOURCE AREA

LEGEND

PROJECTS COMPLETED

Flood Control

1. East Peoria Drainage and Levee District
2. Farm Creek
3. Rocky Ford Drainage and Levee District
4. Spring Lake Drainage and Levee District
5. Mason and Menard Drainage and Levee District
6. Dakford Special Drainage District
7. Lost Creek Drainage and Levee District
8. South Beardstown and Valley Drainage and Levee Districts
9. New Pankey's Pond Special Drainage District
10. Willow Creek Drainage District
11. Coon Run Drainage and Levee District
12. Mauvaise Levee Drainage and Levee District

PROJECTS UNDER WAY

Navigation

13. Illinois Water, 9-Foot Navigation Project

Flood Control

14. Farmers Levee and Drainage District
15. Mouth of Sangamon River
16. Sid Simpson Flood Control Project
17. Meredosia Lake and Willow Creek Drainage and Levee District
18. Scott County Drainage and Levee District
19. Big Swan Drainage and Levee District
20. Dakley Reservoir

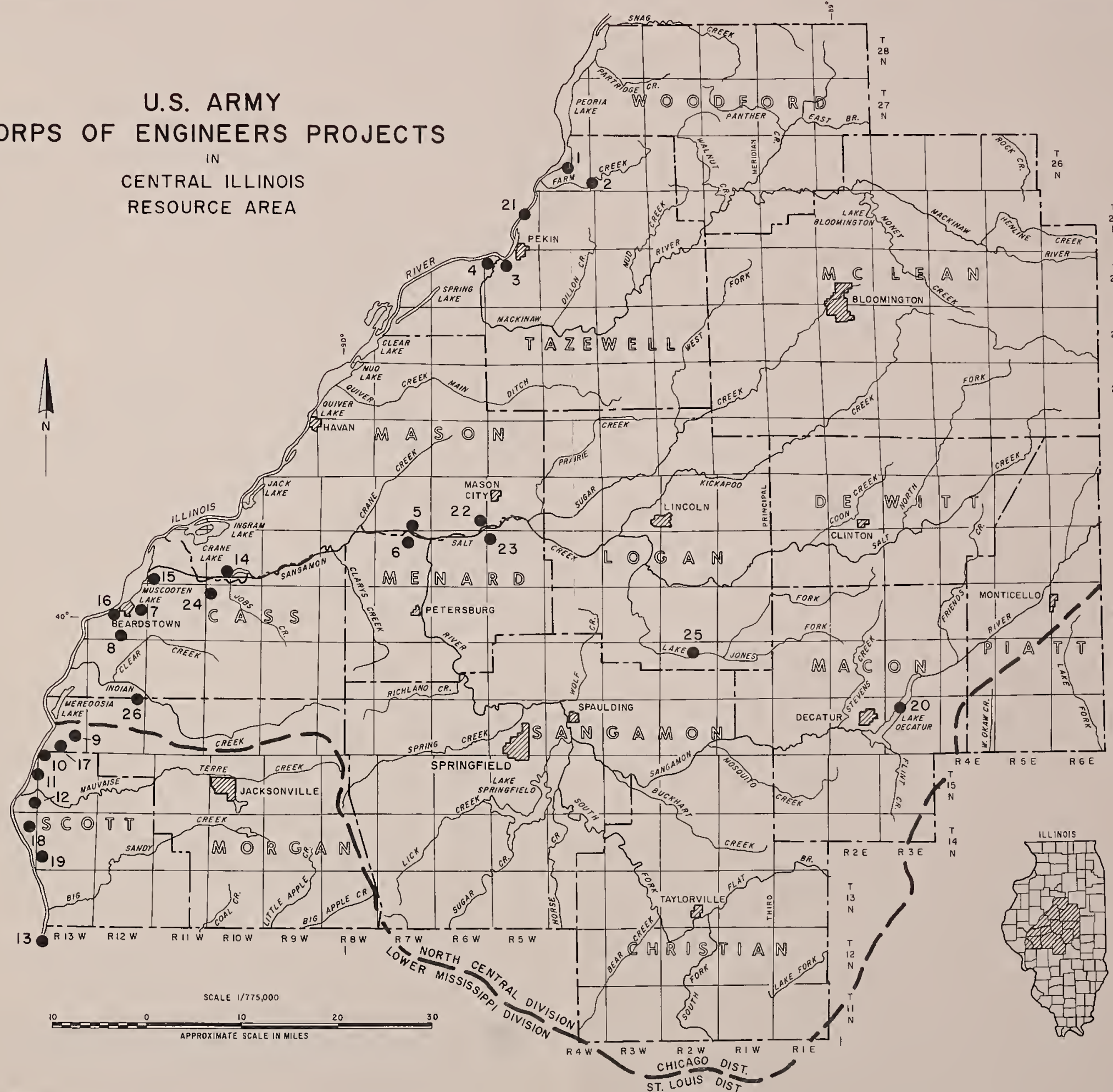
PROJECTS AUTHORIZED BUT NOT STARTED

Navigation

21. Duplicate Lock at Peoria

Flood Control

22. Watts Levee
23. Swiger, Whitney, Young, Hoblet Levee
24. Clear Lake Special Drainage District
25. Lake Fork
26. Indian Creek Area



SOURCE:
SCS DRAWING 5,0-26831 AND
INFORMATION FROM FIELD TECHNICIANS

LAMBERT CONFORMAL CONIC PROJECTION

SECTION VIII

LOCAL GOVERNMENTS RESPONSIBLE FOR RESOURCE DEVELOPMENT

CONTENTS

- A. Drainage Districts
- B. River Conservancy Districts
- C. Conservation Districts
- D. Park Districts
- E. Forest Preserve Districts
- F. Soil and Water Conservation Districts

DRAINAGE DISTRICTS

In 1955 a new drainage code was adopted in Illinois. The code eliminates the distinction between "levee" districts and "farm drainage" districts and made other substantial changes in the law. For information on Drainage Districts, please refer to the following:

1. Illinois Revised Statutes, Chapter 42, Pars. 1-1 to 12-9.
2. Illinois Farm Drainage Law, by H. W. Hannah. Cir. 751, University of Illinois, College of Agriculture, 1956.
3. Illinois Highway and Agricultural Drainage Laws, by Carrol J. W. Drablos and Benjamin A. Jones, Jr. Circular No. 76, University of Illinois Engineering Experiment Station, 1963.
4. Illinois Laws Relating to Waterways, 1965, Department of Public Works and Buildings, Division of Waterways.
5. General Drainage Map of Individual County, (for all counties except Woodford, McLean and Tazewell) published by Department of Public Works and Buildings, Division of Waterways.
6. Comparisons of Drainage Districts, River Conservancy Districts, Surface Water Protection Districts, and Soil and Water Conservation Sub-Districts, prepared by Ray G. Smith, State of Illinois, Department of Agriculture, Division of Soil and Water Conservation.
7. Water for Illinois, A Plan for Action, prepared by the Illinois Technical Advisory Committee on Water Resources, page 226.
8. Inventory of Illinois Drainage and Levee Districts, 1971, Vol. 1 and 2, Illinois Department of Business and Economic Development.

RIVER CONSERVANCY DISTRICTS

The act authorizing the formation of River Conservancy Districts and giving such Districts power to effectuate river and flood control, drainage, irrigation, conservation, sanitation, navigation, recreation, development of water supplies and the protection of fish life was approved June 11, 1925.

At the present time there are no River Conservancy Districts in the Central Illinois Resource Area.

Selected References:

1. Illinois Revised Statutes, Chapter 42, Par. 383-408.
2. Reference 4, under Drainage Districts.
3. Reference 6, under Drainage Districts.
4. Water for Illinois, A Plan for Action, prepared by Illinois Technical Advisory Committee on Water Resources, page 435.

CONSERVATION DISTRICTS

The Conservation District act was approved by the General Assembly August 16, 1963. The purpose of the Act is to provide for the creation of conservation districts which can acquire, preserve and maintain wildland, other open land, scenic roadways and pathways, or rights thereto and use them in such manner and with such restrictions as will leave them unimpaired for the benefit of future generations. The district may be organized by following the general steps of petition to the circuit court; hearing; and favorable vote of majority of votes cast by legal voters of the proposed district at an election. The affairs of the district are managed by a board of five trustees. The district has the power to raise money by general taxation by levying an annual tax of 0.025% of the taxable property therein for use in carrying out its purposes and duties, and an additional annual tax exclusively for the acquisition of real property of not more than 0.075% of the taxable property therein.

The Macon County Conservation District was formed in November of 1966 under the Conservation District Act, Illinois Revised Statutes, 1969, Chapter 57½, Sec. 101-118. They have developed a comprehensive plan for environmental conservation and outdoor recreation entitled The Macon County Outdoor Recreation, Conservation and Open Space Plan, dated September 24, 1968.

The comprehensive plan is presented in two major divisions. One section, dealing with background studies, is to provide a ready reference of information and data necessary for adequate land-use decisions by the Macon County Conservation District. The other section, sets forth the long-range guide for meeting outdoor recreation needs and a plan for environmental conservation.

PARK DISTRICTS

These districts are organized under "The Park District Code" as set forth in the Illinois Revised Statutes, Chapter 105, Par. 11-1-11-5. The park district has become a popular means of providing public recreation facilities and programs. Any territory which forms one connected area may be incorporated as a park district.

Five elected commissioners act as the corporate authorities of the park district with authority to offer a variety of recreational services. The commissioners may operate swimming pools, bathing beaches, boating, and other facilities for water-related recreation. A park district may take possession of and reclaim submerged public lands which are not fit for navigation, and may operate recreational harbors. A park district is organized by the standard petition-hearing-referendum process. The petition must be signed by 100 residents of the proposed district.

To finance the activities of the district, the commissioners may levy a tax of up to 0.10 percent of the value of all taxable property in the district for general purposes and 0.05 percent for recreation. Additional taxes may be authorized by public referendum for certain purposes. The district may issue bonds, but the total amount of bonds issued cannot exceed 2.5 percent of the total assessed property valuation. Revenue bonds may be issued for certain purposes, such as swimming pools and recreational harbors.

There are organized park districts in Tazewell, Macon, and Piatt Counties.

FOREST PRESERVE DISTRICTS

Forest Preserve Districts are organized under the "Forest Preserve Districts" act approved in 1913. There are two districts organized in this resource area, one in Tazewell county and one in Piatt county. For the education, pleasure and recreation of the public, forest preserve districts are directed to: (a) acquire and hold lands containing or capable of containing natural forest; (b) protect the flora, fauna, and scenic beauty of such forest; and (c) restock, restore, and preserve such forest. Forest preserve districts are specifically empowered to acquire lands along watercourses, lakes, ponds, and planned impoundments or lands which are required to store floodwaters, to control other drainage and water conditions, and to preserve ground water.

SOIL AND WATER CONSERVATION DISTRICTS

CENTRAL ILLINOIS RESOURCE AREA

Soil and water conservation districts have been organized in all counties of the Central Illinois Resource Area. They are governed by a five-man board of locally elected directors who under provision of the state law develop and carry out a program of soil and water conservation.

The districts are:

- Cass County Soil and Water Conservation District
- Christian County Soil and Water Conservation District
- DeWitt County Soil and Water Conservation District
- Logan County Soil and Water Conservation District
- Macon County Soil and Water Conservation District
- Mason County Soil and Water Conservation District
- McLean County Soil and Water Conservation District
- Menard County Soil and Water Conservation District
- Morgan County Soil and Water Conservation District
- Piatt County Soil and Water Conservation District
- Sangamon County Soil and Water Conservation District
- Scott County Soil and Water Conservation District
- Tazewell County Soil and Water Conservation District
- Woodford County Soil and Water Conservation District

The United States Department of Agriculture and the Soil Conservation Service have been working under Memorandums of Understanding with these districts since their organization. The Illinois Division of Forestry and the Division of Wildlife Resources have similar working agreements.

Long range district programs have been revised in recent years. These programs reflect the need for district assistance to conserve our resources in relation to total environment, and provide for conservation planning and application assistance. More intensive cropping, larger machinery, new conservation techniques, and urban expansion require new solutions and expanded district programs. The varied uses and demands for land require careful district leadership to meet the soil and water conservation district objectives.

SECTION IX
CONSERVATION NEEDS

CONTENTS

Conservation Treatment Needs for:

1. Cropland
2. Pasture Land
3. Forest Land
4. Other Land

CONSERVATION NEEDS

The National Inventory of Soil and Water Conservation Needs was updated in 1966 and 1967. The inventory was made for non-federally owned land on a county basis. U.S.D.A. and State Agencies concerned with soil and water conservation participated in the inventory.

The following tables show for each county the acres of privately owned (non-federal) land needing conservation treatment. Only the remaining most needed practice or treatment for each acre is listed. It is assumed that good soil management including the application of needed limestone and fertilizer will be applied where needed. It is also assumed that practices already established will be maintained.

CONSERVATION TREATMENT NEEDS FOR CROPLAND

Counties	Total	Ade- quate	Residue Use & Cover Crop	Sod in Rotatn.	Con- tour	Strip Crop or Terr.	Change in Land Use	Drain- age
Cass	164,942	39,904	45,422	28,874	6,021	11,103	20,242	13,376
Christian	360,982	126,483	88,188	20,084	34,824	15,908	6,519	68,976
DeWitt	205,637	67,189	39,852	22,572	18,456	19,481	812	37,275
Logan	356,385	117,524	98,889	7,623	45,529	53,150	1,907	31,763
Macon	293,637	73,455	95,679	15,214	27,117	14,531	0	67,641
Mason	252,184	74,399	90,850	17,577	4,155	7,632	19,634	34,703
McLean	670,103	273,415	134,000	60,823	64,661	33,204	0	104,000
Menard	151,578	63,083	40,861	15,949	2,355	8,777	856	19,697
Morgan	234,680	57,747	79,583	8,789	27,376	42,133	5,903	13,149
Piatt	241,048	59,461	71,843	29,106	10,287	14,407	2,473	53,471
Sangamon	405,145	101,172	135,794	10,750	36,103	28,802	3,847	88,677
Scott	107,854	21,824	37,613	5,609	13,913	13,805	7,766	7,324
Tazewell	311,485	90,226	56,972	54,569	39,105	22,023	4,142	44,448
Woodford	259,586	66,546	54,146	36,197	43,643	37,646	5,171	16,237

CONSERVATION TREATMENT NEEDS FOR PASTURE

Counties	Total	Protection from Overgrazing only	Improvement of Present Stand	Improvement and Brush Control	Reestablishment	Reestablishment and Brush Control
Cass	27,735	5,108	1,751	1,022	8,657	7,755
Christian	31,120	3,913	7,991	0	8,688	162
DeWitt	18,713	0	0	1,918	7,506	1,234
Logan	10,719	634	1,087	211	2,200	480
Macon	10,771	1,000	2,436	0	2,255	2,310
Mason	13,423	1,399	1,958	0	2,517	4,474
McLean	28,030	862	3,862	0	8,211	1,725
Menard	22,743	104	2,284	104	5,800	5,000
Morgan	64,523	5,716	7,806	12,707	3,683	17,488
Piatt	14,372	3,842	4,023	0	1,470	3,512
Sangamon	43,302	6,214	12,299	3,753	1,350	8,544
Scott	23,162	4,575	87	88	5,473	8,658
Tazewell	19,587	2,368	2,763	0	4,946	4,224
Woodford	30,974	518	4,114	3,498	6,200	1,148

CONSERVATION TREATMENT NEEDS FOR FOREST LAND

Counties	Total Commercial	Treatment needed			Grazed and Needs Protection
		None	Establish or Re-establish	Stand Improvement	
Cass	32,000	320	24,000	7,680	21,900
Christian	14,236	1,708	8,531	3,997	3,000
DeWitt	9,200	460	966	7,774	4,600
Logan	9,400	0	3,760	5,640	212
Macon	7,210	450	5,760	1,000	2,540
Mason	39,900	397	29,857	9,646	16,798
McLean	4,311	0	711	3,600	1,724
Menard	14,200	142	2,698	11,360	4,815
Morgan	26,100	522	6,578	19,000	18,319
Piatt	2,000	200	300	1,500	1,000
Sangamon	36,395	7,495	10,000	18,900	18,619
Scott	15,100	287	6,539	8,274	11,460
Tazewell	26,900	300	13,500	13,100	10,554
Woodford	22,600	2,600	5,400	14,600	13,655

CONSERVATION TREATMENT NEEDS FOR OTHER LAND 1/

Counties	Total	In Farms		Not In Farms	
		Total	Treatment Needed	Total	Treatment Needed
Cass	5,088	3,739	1,400	1,349	1,000
Christian	7,444	7,237	6,169	207	155
DeWitt	5,607	5,195	2,000	412	412
Logan	5,719	5,083	1,700	636	200
Macon	19,353	5,718	1,350	13,635	4,720
Mason	14,564	10,695	3,605	3,869	1,287
McLean	9,918	7,318	2,000	2,600	800
Menard	4,175	3,747	1,249	428	107
Morgan	13,592	10,502	402	3,090	122
Piatt	5,008	4,137	1,034	871	348
Sangamon	24,022	11,272	2,250	12,750	750
Scott	7,580	6,580	500	1,000	100
Tazewell	11,328	5,429	1,210	5,899	1,533
Woodford	11,998	7,860	2,300	4,138	1,650

1/ Other land is rural land not in cropland, pastureland or woodland. Other land in farms includes farmsteads, feedlots, and odd areas. Other land not in farms includes rural non-farm residences, strip mines, barrow and gravel pits.

SECTION X
PLANNING AND ZONING INFORMATION

CONTENTS

- A. Land Use Problems Associated with Soils
- B. Planning and Zoning Narrative
- C. Planning and Zoning Map
- D. Population by Counties - Map
- E. List of Publications for Planning Commissions

LAND USE PROBLEMS ASSOCIATED WITH SOILS

Many soils have limitations for their use. Highway engineers, construction engineers, architects, planners, subdividers, and others can benefit from the knowledge and use of soil information. A variety of problems are encountered that are associated with soils. If these problems are recognized, the limitations may be overcome by special design, or an alternative use of the land may be more economical and practical.

The types of problems encountered that are associated with soils are drainage, poor stability, high volume change on wetting and drying, frost heave hazard, frequency and level of water saturation, slow permeability, shallow depths to bedrock, possibility of contamination of water supply, flooding hazard, seepage areas, and topography or slope limitations.

Because of the complexity of the soil pattern on the landscape, a generalized map delineating areas of different kinds of problems is not practical. Some general statements can be made, however, relating some of the problems to identifiable soil and landscape features.

Bottomland soils are subject to flooding and are frequently saturated with water during wet seasons. Low lying depressional areas are frequently ponded or saturated with water and may contain clayey soils that have a high volume change and slow permeability or they may contain unstable organic soils. Soils in drainageways are subject to water saturation and concentrated runoff. Areas underlain by sand and gravel have the hazard of ground water contamination from septic disposal systems. Steep areas that require cutting and filling may cause differential settling under foundations or roads.

For more complete information about a specific area, a detailed soil map and its interpretations should be used.

PLANNING AND ZONING NARRATIVE

The accompanying planning and zoning map indicates that social trends for the Central Illinois Resource Area are somewhat similar as other areas in the State. Seventy five percent of the counties are initiating planning, 30% have zoning established, and 27% have both planning and zoning.

Woodford and Tazewell counties are established with Peoria county into the Multi-Tri-County Planning Region. They have both planning and zoning along with resident staff services available.

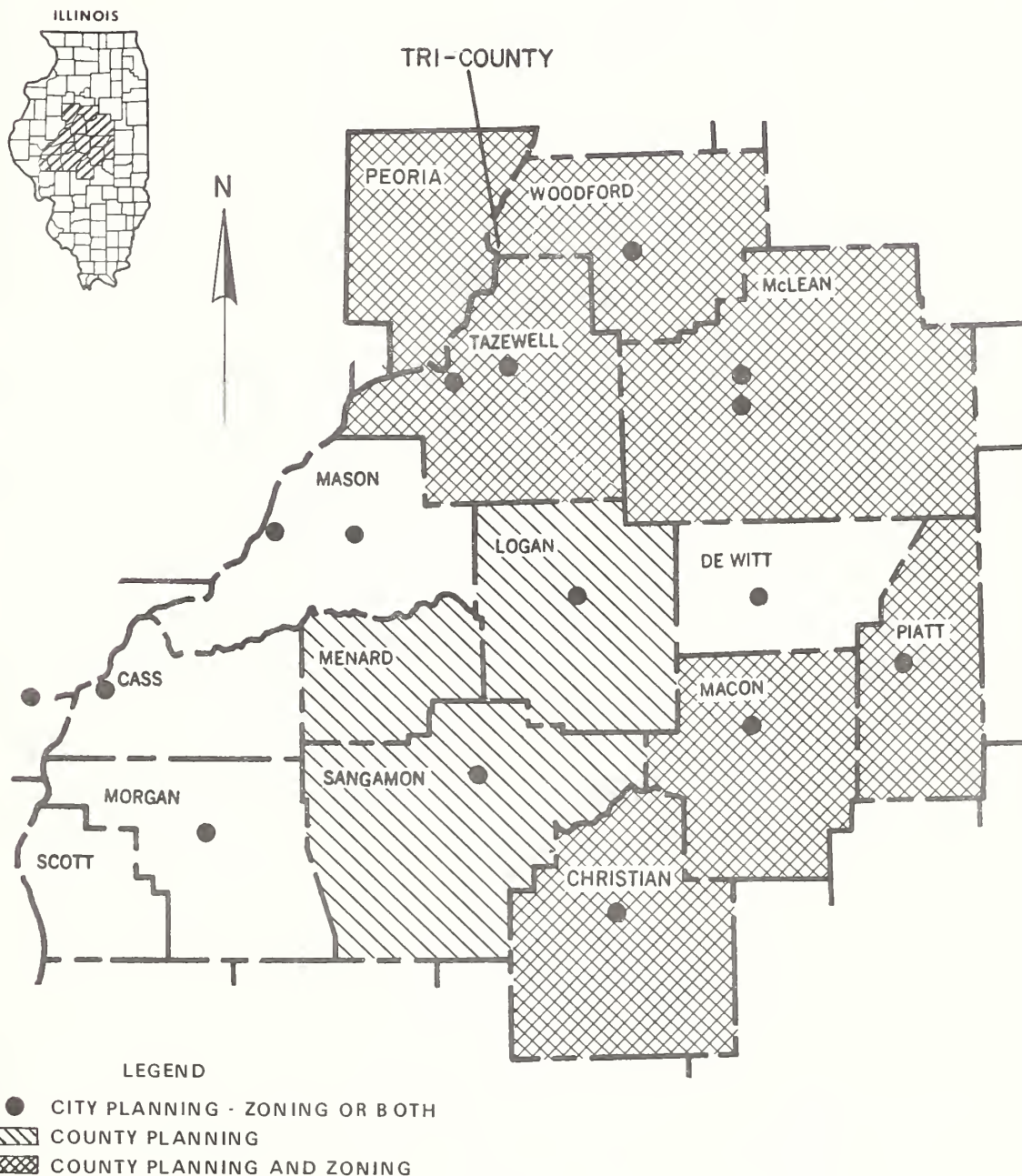
McLean, Piatt, Macon and Christian Counties have planning and zoning staff services available in their own county.

Logan, Menard and Sangamon have County Planning established in their individual counties. Other counties in the Resource Area are in the initiating stages of planning and zoning.

All of the cities in the Central Illinois Resource Area have city planning--zoning or both. Many of the smaller towns in the area adopted city planning or zoning ordinances.

Most of the staff residents of the various planning and zoning commissions, are using Soil Resource Maps for their basis of long-range Urban and Community Plans. These maps are made available to any Community Action Group, through the local soil and water conservation district by the Soil Conservation Service of the United States Department of Agriculture.

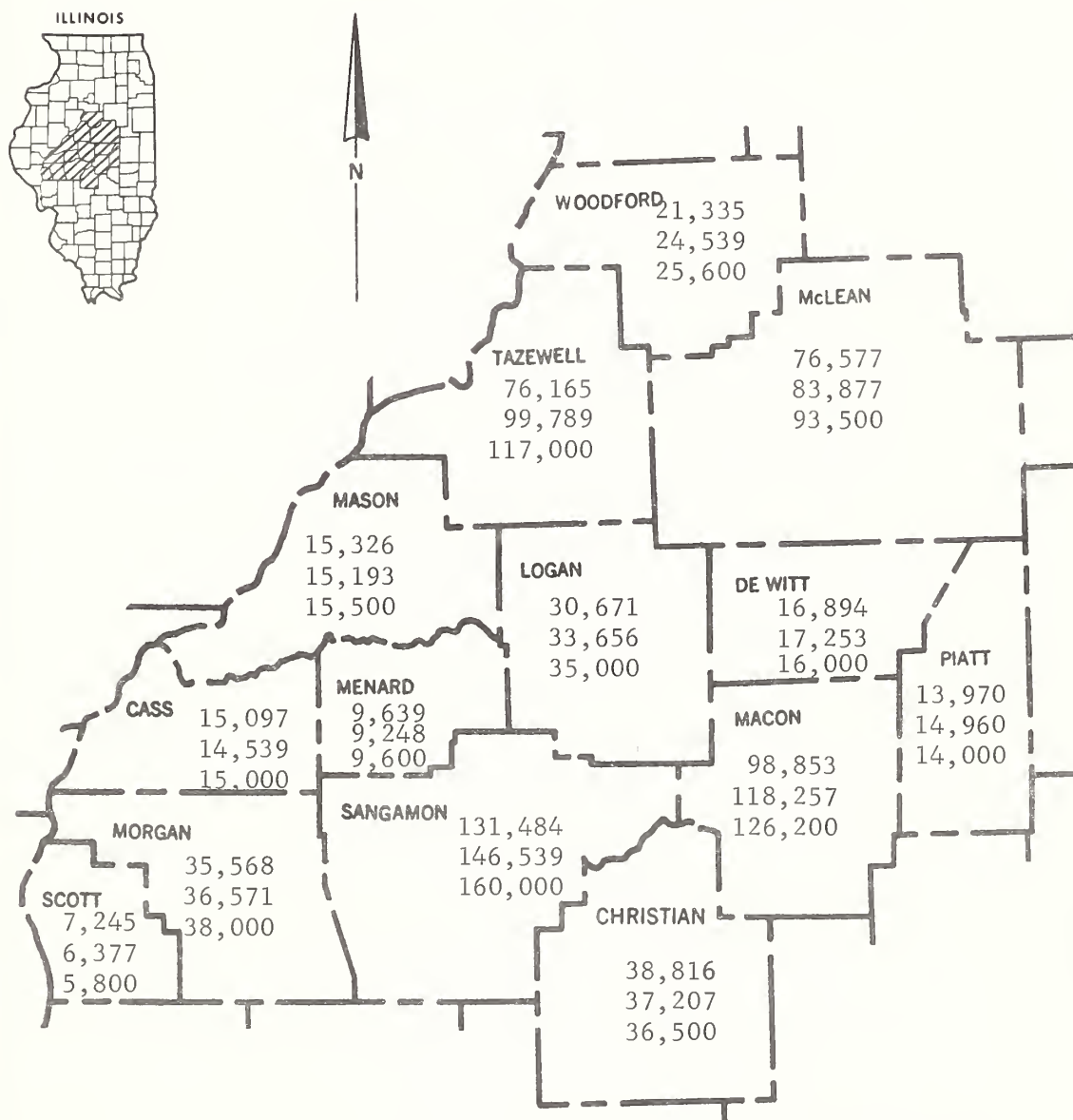
CITIES AND COUNTIES WITH PLANNING AND ZONING IN CENTRAL ILLINOIS RESOURCE AREA



Reference: Cooperative Extension Service, University of Illinois, NEWSLETTER NO. 47.

SCALE 10 0 10 20 30 40 MILES
SCALE 1/1,320,000

COUNTIES IN RESOURCE STUDY OF CENTRAL ILLINOIS RESOURCE AREA



POPULATION BY COUNTY

Upper - 1950
Middle - 1960
Lower - 1969

SCALE 10 0 10 20 30 40 MILES
SCALE 1/1,320,000

LIST OF PUBLICATIONS FOR PLANNING COMMISSIONS

1. The Citizen's Guide to Planning, Herbert H. Smith. Chandler-Davis Publishing Company, West Trenton, New Jersey, 1961, \$2.
2. Mr. Planning Commissioner, Harold V. Miller. Public Administration Service, \$1.
3. The Citizen's Guide to Zoning, Herbert H. Smith. Chandler-Davis Publishing Company, West Trenton, New Jersey, 1965, \$2.
4. Zoning Primer, Rody & Smith, Chandler-Davis Publishing Company, West Trenton, New Jersey, 1960, \$1.
5. City Planning in the Sixties, Goodman & Kaufman, University of Illinois, Bureau of Community Planning, 1965, \$2.
6. Principles & Practices of Urban Planning, Goodman & Freund, International City Managers Association, 1968, \$12.50.
7. Regional Development and Planning, A Reader, Friedmann and Alonzo, MIT Press, Cambridge, Massachusetts, 1964, \$9.75
8. The Zoning Game, Richard F. Babcock, University of Wisconsin Press, Madison, Wisconsin, 1966, \$5.75.
9. Soil Surveys and Land Use Planning, Bartelli, Klingebiel, Baird, and Heddleson, Soil Conservation Society of America and American Society of Agronomy, 677 Segal Road, Madison, Wisconsin, 1966.
10. A Place to Live, The Yearbook of Agriculture, USDA, 1963, \$3.
11. Urban Planning in Rural America, U.S. Department of Housing and Urban Development, Government Printing Office, Washington, D. C., 40 cents.
12. Rural Zoning, People, Property and Public Policy, Federal Extension Service, USDA, Washington, D. C. ESC-563, 1967.
13. Zoning--An Aid to Community Resource Development, Federal Extension Service, USDA, Washington, D. C., PA-814, 1967, 15 cents.
14. Comprehensive Plans for Improving Counties, USDA, Economic Research Service, Washington, D. C., AIB-316, 1967, 15 cents.
15. Guides for Planning Your Community, Illinois State Department of Business and Economic Development, Springfield, Illinois, 1966, free.

16. A Manual of Procedures for Obtaining Community Planning Assistance, Illinois State Department of Business and Economic Development, Springfield, Illinois, free.
17. ABC's of County Government, Charles E. Whalen, University of Illinois, Urbana, Cooperative Extension Service, Circular 933, 1966, free.
18. County and City Data Book, U. S. Department of Commerce, Bureau of the Census, 1967, \$5.50.
19. Small Town in Mass Society: Class, Power and Religion in a Rural Community, Vidich and Bensman, Anchor Books, Doubleday & Company, Inc., Garden City, New York, 1958, \$1.75.
20. Farms and Farmers in an Urban Age, Edward Higbee, The Twentieth Century Fund, New York, 1963, \$1.45.

Reference: Cooperative Extension Service, University of Illinois,
Urbana, Illinois --- NEWSLETTER NO. 47.

SECTION XI
TRANSPORTATION

CONTENTS

- A. Highways
- B. Railroads
- C. Air Service
- D. The Illinois Waterway

TRANSPORTATION

A. Highways

The Central Illinois resource area is well served by a network of highways. The principal highway is Interstate 55 which bisects the area and is the major highway link between Chicago and St. Louis. Interstate 74 serves the northern counties of the area and provides a major east-west transportation route. All major cities are served by bus and truck transportation facilities. Farm to market roads are generally good.

B. Railroads

All major communities are served by railroad freight service. The Gulf, Mobile and Ohio and the Illinois Central are the major railroads serving the area.

C. Air Service

Major airports servicing the area are at Peoria, Springfield and Decatur with scheduled airline service.

D. The Illinois Waterway

Perhaps no one thing has contributed to the industrialization of the Central Illinois resource area more in the past 30 years than the navigability of the Illinois River.

The growth of river traffic through the Peoria Locks can be seen with the following figures:

1940 - 2,900,000 tons

1960 - 21,663,000

1968 - 27,353,060

Type of commodities important to the area can be seen with the following figures from the Peoria Locks.

	<u>1935</u>	<u>1951</u>	<u>1965</u>
Coal	2,600 tons	5,607,000 tons	10,408,000 tons
Petroleum	275,000	5,300,000	5,079,000
Grain	107,000	1,607,000	4,224,000
Gravel & rock	841,000	3,133,000	4,078,000

River traffic at the LaGrange and Peoria Locks in 1968 reached 65-70% of saturation. Future plans are to provide a deeper channel and larger locks as traffic needs increase.

The density of Illinois River traffic in comparison to other rivers is as follows (1965):

Ohio River - 49,500 tons/mile

Mississippi River - 68,200

Illinois River - 94,000

By subtracting the upstream tonnages by commodities of the LaGrange Locks from the upstream traffic of the Peoria Locks, and reversing the procedure on the downstream traffic we can get an idea of the loadings that occur in the resource area. In 1967 the coal and grain loadings that originated between the LaGrange and Peoria Locks are as follows:

Coal - 9,316,227 tons

Grain - 2,460,885 tons

Most of the coal loaded in the resource area traveled upstream to the Chicago area and most of the grain loaded in the resource area traveled downstream to the Gulf ports for overseas shipment.

The above river traffic information was provided by L. P. Murphy, Project Engineer, U.S. Army Corps of Engineers and his staff.

